

# SAM

SECTOR SKILLS STRATEGY  
IN ADDITIVE MANUFACTURING

## Professional Profiles/Set of Skills' Roadmaps

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## 1. Introduction

The SAM Sector Skills Strategy addresses the common vision and actions to support the growth, innovation and competitiveness of the Additive Manufacturing sector.

A top-down approach grounded on global and societal and technical trends and proceed by the skills needs anticipation matching with professional profiles is used to define the AM skills strategy from 2019 to 2030, as represented by the 4 pillars/streams of the strategy. The following objectives are defined in the Sector Skills Strategy:

- Global and Societal Changes analyses with milestones definition
- Major technical developments analyses
- Current and Future Professional Profiles (skills) identification continuous improvement and development process that will allow maintaining the skills strategy updated

The scope of the current **Professional Profiles and Skills' Roadmaps** is to identify the current professions working in the Additive Manufacturing Sector, present the new emergent Professional Profiles as well as identifying the related skills gaps and challenges in addressing AM skills. Moreover, the Professional Profiles and skills Roadmaps scope is extended to professionals from other disciplines which might be directly or indirectly linked to AM technology, thus progressing through upskilling<sup>1</sup>/*reskilling* pathways.

The SAM roadmap reflects the mid-point between existing skills and future ones, providing relevant findings and hypotheses to guide future work on the assessment of current and future skills in AM, which will take place in work package 2 “Forecast Methodology”, as well as in other activities within the SAM project.

To address the above-mentioned objectives, this output will compile the findings from an initial literature review on AM Professionals in the Industry, consultation and data analyses from Human Resources Departments, Recruitment Agencies, recruitment advertisements and available online statistics. In addition, developments undertaken in the framework of Deliverables 1.2 (Global and Societal Milestones) and Deliverable 1.3 (Long Term Technological Plan) were also considered to set up the current Roadmap.

Finally, the resulting Professional Profiles/Skills' Roadmaps conclusion is represented graphically as a timeline of the relevant Professional Profiles /Skills to be covered until 2030.

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<sup>1</sup> Short-term targeted training typically provided following initial education or training, and aimed at supplementing, improving or updating knowledge, skills and/or competences acquired during previous training (Cedefop, 2004)

## 2. AM Professional Profiles

The starting point of this report will adopt and reference **10 AM Professional Profiles** as defined in the SAM survey indicated in Work Package 2, which refer to: AM Designer, AM Process Engineer, AM Inspector, Inspection Technician, Non-destructive testing (NDT) Technician, AM Supervisor, AM Coordinator, Metrology Engineer, Materials Engineer, AM Operator/Technician.

The establishment of these 10 AM Professional Profiles is linked to the efforts of the consortium and diversity of stakeholders (e.g. research and technology development organizations, industry/companies, higher education institutions, sector representatives and vocational education providers) to bridge the gap between education and market demand.

As mentioned in the SAM proposal, an initial state of play on technological innovation and necessary skills requirements was already undertaken linked to project partner activities in prior AM projects, namely in CLLAIM, ADMIRE, 3D PRISM and METALS, where some of the profiles were created.

Two profiles emerged from 3D PRISM and METALS projects: Entry level technician (related to AM Machine workers and Maintenance) and experienced level technician (related to emerging Manufacturing profiles AM CAD Worker, AM Powder metallurgist, AM Health & Safety Officer, Machine Optimization Officer, Quality Control Expert). At this stage, the general descriptions of these profiles were used as the reference to define the above mentioned 10 AM profiles in the surveys prepared by SAM. If, based on the feedback of industry, these profiles are identified as *Real Case, Short-term or Foresight* skills requirements, the SAM project will use the profiles description developed in these project as the basis for improving/updating the identified profiles and, based on this information, develop the necessary training guideline/curriculum. These projects also developed training materials that will also be used aligned with the profile's requirements.

Taking the example of CLLAIM and ADMIRE projects, the research complemented both quantitative and qualitative methods. The outcomes from this field research led to the mapping of the technical skills gaps in metal AM (figure 1).

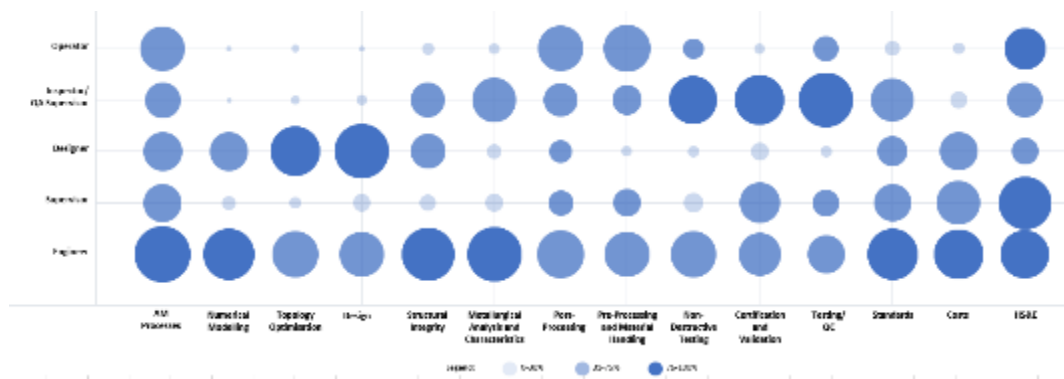


Figure 1 - Technical Skills Gaps in Metal AM

Based on the findings, validation sessions were conducted to align the Occupational Standards with industrial requirements, leading to the development of the European AM Metal Process Engineer, covering PBF-LB, DED-LB and DED-Arc and European Metal AM Operators Qualifications, covering PBF-LB, PBF-EB, DED-LB and DED Arc. Currently, CLLAIM is developing the European Metal AM Designer for DED and for PBF and the European Metal AM Inspector, which will be released and piloted during next year.

As such, the current skills roadmap references and uses the descriptions of the metal AM professional profiles and skills for the AM Process Engineer, AM Designer, AM Inspector and AM Operator levels. Currently, CLLAIM and ADMIRE projects have developed specific curriculum organised by competence units, including the training materials, which will be revised /updated in SAM (WP5 – Piloting of the 1<sup>st</sup>

stage Real Case) if, based on the identification and validation of needs in SAM, that revision/update is required.

It's important to mention that the new professional profiles, qualifications, competence units and training materials developed in SAM will not overlap neither compete with the results already developed in CLLAIM and ADMIRE, as the idea is to focus on developing the materials that are not ready at this stage, as well to have full Qualification System with several Qualifications that will combine Qualification developed in CLLAIM and ADMIRE with the Qualification developed in SAM.

As an example, if the needs identified in SAM state that there is a Real Case Scenario for Metal Operators for DED-Arc, which has already been developed by CLLAIM. In SAM we will assess if the Qualification Profile and Guideline is according to the current Industrial needs and, in case it is not, the Metal Operator for DED-Arc Qualification will be updated. On the other hand, if SAM identifies that there is a Real Case Scenario for Metal Operators for Binder Jetting, which has not been developed in CLLAIM, then SAM will focus on developing this Qualification Guideline and required training materials.

Summing up, the future work on SAM, after the mapping of Professional Profiles and skills, represents the midpoint between the current skills and new skills in AM. Meaning that the AM surveys and forecasting methodology undertaken in WP2 will provide answers to the following questions:

- What current professions will need to update regarding AM knowledge and skills?
- Would it be necessary to create a specific new profile for AM Professions similar to the Engineer and Operator?
- Which updates in terms of knowledge and skills will be required to enrich the existing workforce?

These and other questions will be validated during the first round of consultation with industry and Research centres in the framework of SAM (January 2019).

The terms of the Professional Profiles and the descriptions of the Professional Profiles are shown below, with the identification of the one already validated (v) and to be validated (tbv). It is also noted that the mapping exercise may not be limited to only the 10 Professional Profiles but could also consider professionals from other disciplines working in AM.

### Professional Profiles of AM for the SAM project

**1. AM Designer (tbv)** - Professionals that are able to design parts optimised for function, cost and manufacture / Description of Profile: Design AM solutions for specific AM process ensuring and validating that parts can be made cost-effective and efficiently; Validate specific AM process design projects by verifying requirements for production with engineer as well as process requirements, ensuring liaison with other technical areas to sign of drawings.

**2. AM Process Engineer (v)** - Professionals that are able to create the manufacturing process for the efficient production and post-processing of additively manufactured parts / Description of Profile: Develop and execute Specific AM Process plans including validation of design, implementation, pre and post-processing operations, assurance of parts conformity and identification of the causes and the corrective actions of technical production problems; Coordinate the tasks distribution between the operators according to the work plan as well as manage the link between them and the management.

**3. AM Inspector (tbv)** / Description of Profile: Professionals that are able to define and carry out inspection of additively manufactured parts / Description of Profile: Carry out quality assessments and inspection of AM parts, Interpret DT and NDT reports.

**4. Inspection Technician (tbv)** / / Description of Profile: Carry out the dimensional inspection of complex

geometries of additively manufactured parts to the client's requirements.

**5. NDT Technician (tbv) / Description of Profile:** Carry out the safe and reliable non-destructive testing of complex geometry additively manufactured parts.

**6. AM Supervisor (tbv) / Description of Profile:** Supervise AM production on shop floor ensuring quality and HSE procedures.

**7. AM Coordinator at the Engineer level (tbv) / Description of Profile:** Evaluate manufacturing suitability for customers' requests defining which processes are fit for the request, based on the application, material, design and cost of the part. Coordinate the work with the AM team.

**8. Metrology Engineer (tbv) / Description of Profile:** Use their comprehensive knowledge of metrology to specify the optimal measurement method to meet the functional and manufacturing requirements of the part.

**9. Materials Engineer (tbv) / Description of Profile:** Use their comprehensive knowledge of materials to specify the optimal material to meet the functional and manufacturing requirements of the part and implement material handling processes for the entire material life cycle.

**10. AM Operator / Technician (v)-** Professionals that are able to carry out the safe and reliable production and simple post-processing of additively manufactured parts / Description of Profile: Operate AM machines, including fitting and setting up, maintenance and specific repairs.

### 3. Methodology

To map the relevant professions working in Additive Manufacturing at the moment, a three-stage methodology was used to collect the data, as follows:

- 1.- to compile the results from the literature review of Additive Manufacturing Professionals in the Industry at the moment;
- 2.- to collect data from recruitment adverts and other available statistics;
- 3.- to validate with coming directly from the research field.

This form of data collection using a mixed quantitative and qualitative approach will assure the validity of the collected data on the same topic which involves different types of data collection methods.

## 4. Growth of Additive Manufacturing

Heidi et al. (2016) reported that manufacturing in the European Union directly contributes to 30 million jobs and twice as many jobs indirectly. Manufacturing also contributes to 80% of total EU exports and 80% of private R&D expenditure. However, when it comes to advanced manufacturing, it only contributes to 1.6 million jobs and 11% of the total EU production as half of European manufacturing companies still do not embrace the use of advanced manufacturing technologies. Nonetheless, AM is seen to be an enabler for the EU to secure a strong industrial base. Globally, US\$642.6 million was recorded for the revenue of AM manufactured goods, with the US accounting for an estimated \$246.1 million or 38.3% of global production in 2011 (Monzon, et al., 2015). Market forecasts predict that between 2031 and 2038, AM is expected to reach 50% of the market potential, while reaching 100% of the market potential between the year 2058 and 2065 (Thomas, 2016).

The use of Additive Manufacturing enables computerized 3D solid models to be directly transformed into finished products with complex geometry without the need for fixtures or cutting tools (Huang et al., 2013). Designs that are enhanced with topological optimization could also increase the product's functionality through better-managed means of material and production resources (Chu, Graf and Rosen, 2008). Achillas et al. (2015) clarified that the use of Additive Manufacturing supports the product "time-to-market" and as a whole, rapid manufacturing could affect modern supply chains and logistics networks which require strategic business changes including greater collaboration with equipment vendors and material suppliers. It would also require a more regionally organized supply chain network where AM favours near-shoring of production (Chatzipanagioti, 2011; Coole, 2012). In the long term, supply chains will shift from a production-distribution-retail model towards an electronic-retail model where manufacturing and distribution will be closer to the end customer (Reeves, 2008). Rapid manufacturing is advantageous because no tooling costs are required which reduces heavy capital investment in fixed assets; and the ability to produce end-use products that eliminate the need for assembly and reduced inspection costs.

### 4.1 Literature Review of AM Professionals in the Industry at the Moment

To establish the most relevant aspects within the scope of this study, a literature research was carried out using three databases: *SCOPUS*, *ISI Web of Science* and *ScienceDirect*. The use of *Google Scholar* was included in the search process as this web search engine indexes the full text or metadata of scholarly literature across a wide array of publishing formats and disciplines. A search of the indexes of popular engineering, manufacturing, social science and human resource journals was also undertaken. The use of carefully selected and relevant keywords was used, including but not limited to "Additive Manufacturing Jobs", "Additive Manufacturing Employment", "Additive Manufacturing Employability", "Additive Manufacturing Workforce", "Additive Manufacturing Specialists", "Additive Manufacturing Qualifications", "Additive Manufacturing Training", "Additive Manufacturing Human Resource", "Additive Manufacturing Workers".

. From the literature review, researchers claim that in the near future, lower skilled human jobs would be eliminated and replaced through technology, leading to the remaining work becoming ever more complex and comprehensive. Bowles (2014) highlighted that Northern European countries such as France, Germany, Sweden and the UK would potentially be less affected by computerisation risk, as compared to Southern European countries where up to 45 to 60 per cent of the workforce could be affected by high and persistent unemployment due to the implications of Industry 4.0. Gress and Kalafsky (2015) also claimed that while AM machines will be expected to perform most of the production tasks, there will be a demand for jobs including technicians, trouble-shooters, repairmen, and even programmers.

Naudé, Surdej and Cameron (2019) carried out a survey among eight Central and Eastern European countries (CEECs) including Bulgaria, the Czech Republic, Lithuania, Hungary, Poland, Romania, the Slovak Republic and Slovenia. They found that Czech Republic, Lithuania, Hungary and Slovenia were most



Industry 4.0 ready; and Bulgaria, Slovakia, Romania and Poland were the least ready for Industry 4.0. These eight countries in 2017 were home to 98 million people with a combined GDP of US\$ 2,7 trillion, and the average contribution of manufacturing to these 8 countries' GDP was 20 per cent higher than the EU average of 15 percent. The authors highlighted that if the region does not absorb and apply the technologies of Industry 4.0, its international competitiveness may suffer or experience a risk of deindustrialization. In light of this, the European Commission (2017) identified policies to strengthen each country's industrial competitiveness and modernization to ensure sustainable growth of the manufacturing sector. In terms of shortcomings, the European Commission noted that "national industry 4.0 initiatives tend to focus on technology and infrastructure, with skills development a secondary goal".

Adapting AM processes to enable Industry 4.0 will have a direct effect on producers and their labour force as well as on companies that supply manufacturing systems. The concept of Industry 4.0 refers to the digitization of the entire value chain and the interconnection of people, products, machines, processes and systems through real time data exchange (Hecklau et al., 2016). The European Union has a great interest in a common strategy for Industry 4.0, in which the strategic objective of 'Manufacture' as a Horizon 2020 initiative, is to boost reindustrialisation and to increase the manufacturing industry's current GDP contribution from approximately 16% to as much as 20% (Manufacture, 2015). As processes become more complex, it will lead to jobs requiring higher qualifications, and consequently loss in jobs requiring lower qualifications (op cit). They suggested that companies should qualify their employees for more strategic, coordinating and creative tasks with higher responsibilities. One of the predicted impacts of Industry 4.0 is the loss of jobs in manufacturing, which is not caused by competition from low wage countries, but rather the replacement of a low-skilled workforce by machines (Ciffolilli and Muscio 2018).

In response to gain a more competitive manufacturing advantage, the United Kingdom spearheaded the Plan for Growth programme that focuses on advanced manufacturing with four major initiatives including funding for Catapult Centres with the first being in high-value manufacturing that includes all forms of manufacture using metals and composites; developing nine Centres for Innovative Manufacturing to carry out research on strategically important areas for manufacturing; accelerating the Manufacturing Advisory Service for companies and personnel training and skilling focusing on productivity and innovation improvements; and offering an international prize in engineering known as the Queen Elizabeth Prize for Engineering (Livesey, 2012; H.M. Treasury, 2011; Hauser, 2010).

In the study of the future of productivity and growth of manufacturing industries, Rößmann, M. et al. (2015) suggested that in their analysis of manufacturing in Germany, the use implementation of Industry 4.0 could lead to a 6% increase in employment during the next ten years from 2015-2025. In addition, they claimed that the demand for employees in the mechanical-engineering sector may rise by as much as 10% during the same period. They pointed out that competency transformation is one of the key challenges ahead because in the short term, the trend toward greater automation will displace low-skilled labourers performing simple, repetitive tasks. However, in the long term, the AM industry (and Industry 4.0 sectors) will see a growing use of software, connectivity, and analytics, leading to skills required for software development and IT technologies, such as mechatronics experts with software skills. This shift in competencies requires adaptation of new roles, recruiting, and vocational training to prepare the workforce with additional IT skills that will be required. Lorenz, M. et al. (2015) used a case study in Germany to understand the effects of introducing digital industrial technologies based on 40 jobs in 23 industries and found that more jobs will be gained than lost, although they pointed out that workers will require significantly different skills. The detailed modelling forecasts a net increase of approximately 350,000 jobs in Germany through 2025. Greater use of robotics and computerization will reduce the number of jobs in assembly and production by approximately 610,000. But this decline will be more than offset by the creation of approximately 960,000 new jobs, particularly in information technology (IT) and data science. The findings by Bonekamp and Sure (2015) undertaken in Germany indicate that Industry 4.0 would see a substantial decrease in lowly-skilled jobs and an increase in highly-skilled jobs which have a greater emphasis on IT-related tasks. They also stress a growing importance of continuous learning, training and education for a future workforce that is capable of adapting qualification requirements

derived from Industry 4.0 technologies, in line with earlier findings by Maier & Student (2014) and MHP (2014) who claimed that German small and medium-sized companies will face challenges of digitalisation and cyber physical systems as businesses progressively advance towards the integration of Industry 4.0 technologies into their enterprise. The paper by Ślusarczyk (2018) presented results based on secondary data, professional reports and studies carried out by State institutions, consortia or enterprises in Poland. It was found that only 22% of Polish enterprises understand how Industry 4.0 technologies will change their labour force and the organizational structure. From the same study in a global perspective, half of the respondents cited that the most important challenges while implementing Industry 4.0 are the lack of digital culture and training. However, from the perspective of individual countries, the greatest barrier in Poland was high financial investment requirements, while in Germany was the lack of properly qualified staff.

The paper by Kianian, Tavassoli and Larsson (2015) investigates how Additive Manufacturing technologies, seen as a process innovation could contribute to the creation of jobs as well as the types of jobs are analysed. The scope of their paper is highly relevant, although the findings are only based on a case study and the data collected was through three interviews conducted in Sweden. Their findings indicate that the AM sector contributes to job creation in manufacturing as well as in the service sector. The use of AM also contributes to job creation in product development stages in particular for complex but low volume components. They acknowledge that the AM process chain would require different skills, and in particular there is a need for highly-skilled labour to operate advanced machinery such as AM systems. The National Statistics Institute in Spain analysed the active population classified by the economic activity in the first quarter of 2018 and found that 1,750,000 persons are employed in jobs with a high probability being replaced by machines, and only 1,550,000 have a lower probability of being replaced by machines (Mineco, 2018). The paper by Pérez-Pérez et al. (2018) suggested changes that will occur in AM by 2030, predicted by 100 Spanish experts through Delphi prospection, in which their findings show that technical experts with specific knowledge and skills will require changes to current teaching syllabuses in Science, Technology, Engineering, Arts, and Mathematics (STEAM), and suggesting that the introduction of AM in study plans may be an appropriate alternative. Their study also described the consequences of the Fourth Industrial Revolution for the employment market and jobs in Spain, as well as a framework for the possible implementation and development of AM. Their survey comprised of 21 scenarios and 67 questions about the AM market, business models, supply chain, new products, services, applications, specific training, certification, etc. They proposed that to have human capital available with ICT skills, it will be necessary to develop a Spanish national-level training plan starting from primary school to university degrees, particularly in engineering. In addition, the inclusion of the use of AM in teaching syllabuses will be necessary and technicians with specific qualifications for AM are going to be needed. Future technicians will need to have cognitive competence to deal with a changing technological environment (mathematics, logic, data processing, project management) and non-cognitive skills (critical thinking, teamwork, achievement of goals, interpersonal relationship skills, or troubleshooting abilities). Schallock et al. (2018) also pointed out that the scope for qualification of Industry 4.0 focuses on digitization of the industry, which covers aspects of digital learning techniques, job-related qualification, leading and operating production systems, interdisciplinary product and process development, specific competencies pertinent to industry 4.0, and competency evaluation.

More recent findings by Matos et al. (2019) presented the results of multiple case studies conducted among four organizations based in Portugal that use AM technology to determine their perceptions regarding the social impacts of AM such as skills and education requirements. They cited that other authors including Gershenfeld (2012) and Chen et al. (2015) view that AM technology could “create unemployment and political destabilization in some economies, leading to changes in labour intensity, employment schemes, types of work, work conditions, working hours, working places, and employment policies, or even in changes in labour laws.” Despite those claims, all the interviewees in the four Portuguese organizations considered that educational curricula and the need to participate in training and professional requalification would create a positive impact on the professional status and employability, and where the introduction of qualifications in the domain of AM technology is important

(Matos et al., 2019). Other researchers including those in Italy reported that the recruitment processes in engineering areas are beginning to value the knowledge of the use of AM technology; and developing new skills and competencies for AM is seen to be positive (Minetola, 2015). For example, the paper by Bianco (2018) considers measures and methods enabling Italian workers to stay on the digital labour market, stressing the importance for all stakeholders to be involved in the process to promote a workforce for the digital future. Future production will be characterized by highly complex, varying and knowledge-intensive work processes, and an ageing population will lead to greater reliance on support and technological assistance. Wolf et al. (2018) conducted a study in Austria with manufacturing companies, discussing future work activities, demographic challenge, age-related changes, and the role of age-appropriate work and standardization. Their findings align with Gehrke et al. (2015) where skills related to information and data processing, organizational and process understanding and interaction skills with humans and machines will be crucial for workers.

Other papers discuss a more generalised view of the implications of AM concerning labour and the need for newer tools. Seifi et al. (2016) proposed an integrated computational materials engineering method for accurate AM tools that use validated physics-based modelling and simulation methods could decrease the need for experimental testing of technologies and processes to provide manufacturers with a more accurate approach to optimize part designs. The paper by Huang et al. (2013) discusses issues related to the societal impact of AM, covering aspects of manufacturing supply chains and potential health and occupational hazards. They noted that “AM machine operators need to be educated in handling and disposal of these materials along with the handling of high-intensity laser beams. As the AM industry continues to evolve and expand, there is a need for more regulation to safeguard the AM workforce”. In addition, metrology which refers to the science of measurements is also required for AM industries to ensure technological confidence of being able to produce high-quality AM-built parts, controlling and optimizing the production parameters by better utilization of feed materials, yet increasing production, reducing part rejection, enhancing energy efficiency and decreasing post-processing requirements (Tofail et al., 2018). Scott et al. (2012) claimed that machine qualification standards could support machine-to-machine and part-to-part repeatability, and government qualification procedures can lead to industry best practices, which could help achieve greater uptake of additive technologies (Kinsella, 2011). Qualification opportunities at a machine or process level could help reduce time and effort (Frazier, 2010). The produced AM parts must meet desired specifications for chemistry, surface roughness, damage tolerance, fatigue, strength, and other properties that could be influenced by the chemistry, resulting microstructure and defect population. Limited knowledge has been due partly because of a lack of detailed understanding of the processing–structure–property relationships, test methods, knowledge and standardisation (Lewandowski and Seifi, 2016). Therefore, Annunziata and Bourgeois (2018) claimed that companies will face new and changing requirements for human capital, in which technology changes will require new skills due to the convergence of different disciplines such as digital-industrial skills or a mix of traditional mechanical skills and software skills.

### In a nutshell

The literature review of AM professionals in the industry has shown that several countries in Europe recognise that there is a pressing need for the current workforce to be trained and educated, as well as having **more regulation to safeguard the AM personnel**. It is also recommended that as **competency transformation** is one of the key challenges for the AM industry which industry, which will see a growth and emphasis on the use of software, analytics and IT technologies.

### In a nutshell

#### Overview of skills gaps

- growing use of software, connectivity and analytics will lead to skills required for software development and IT technologies, such as mechatronics experts with software skills.

- cognitive competence to deal with a changing technological environment (mathematics, logic, data processing, project management) and non-cognitive skills (critical thinking, teamwork, achievement of goals, interpersonal relationship skills, or troubleshooting abilities) will be fundamental for future technicians;
- skills related to information and data processing, organizational and process understanding and interaction skills with humans and machines will be crucial for workers;
- knowledge on metrology is also required for AM industries to ensure technological confidence of being able to produce high quality AM-built parts, controlling and optimizing the production parameters by better utilization of feed materials, yet increasing production, reducing part rejection, enhancing energy efficiency and decreasing post-processing requirements
- digital-industrial skills or a mix of traditional mechanical skills and software skills will be needed;
- there will be a demand for jobs including technicians, trouble-shooters, repairmen, and even programmers

### Challenges in addressing AM skills

- GREATER AUTOMATION → low-skilled labourers performing simple and repetitive tasks
- HIGHLY COMPLEX, VARYING AND KNOWLEDGE-INTENSIVE PRODUCTION PROCESSES → high level of specialisation of the different AM workers
- AM PROCESS CHAIN REQUIRING DIFFERENT SKILLS → highly skilled operators for advanced machinery
- RAPID TECHNOLOGY AND ENVIRONMENT CHANGES → cognitive competence for adaption and for problem solving among other non-cognitive skills
- AGEING POPULATION → reliance on support and technological assistance
- CONTINUOUS LEARNING, TRAINING AND EDUCATION → adaption of qualification requirements, development of new qualifications, upskilling and re-skilling pathways for the current workforce
- REVIEW OF TRAINING SYLLABUS IN STEAM → introduction of AM in study plans may be an appropriate alternative

## 4.2 Data from Recruitment Adverts and other Statistics

To collect data, advertisements and job postings on more established websites such as Reed (<http://www.reed.co.uk>) and Indeed (<https://www.indeed.co.uk>) that cover jobs and employability opportunities across Europe were examined. Other sources include popular HR periodicals such as People Management (<https://www.peoplemanagement.co.uk>) and AM recruitment platform (i-Amdigital - <https://i-amdigital.com/>) Obtaining information from companies such as through their organisational charts or hierarchy three from the Companies House which is a UK-based agency was also used.. This register was created in 1844 and the agency is sponsored by the Department for Business, Energy & Industrial Strategy (<https://www.gov.uk/government/organisations/companies-house>).

A total of 21 online recruitment search engines (Table 1) are searched using two main keywords “3D Printing” and “Additive Manufacturing” to obtain relevant AM Professionals jobs in the Industry. The duration for active job search took place from June to November 2019 to collect an “across-the-board” list of jobs advertised for AM Professionals. Among the websites used to search AM jobs across the EU, “EURES - The European Job Mobility Portal” (<https://ec.europa.eu/eures/public>) provides the most comprehensive search results, covering more EU countries. For jobs that are not advertised in English are translated using Google Translate to interpret the advertised results.

In terms of countries covered, twelve were used as references since they are the one being identified as being recruiting AM Professionals.

Table 1 - List of countries and online recruitment search engines used for data collection

No	Country
1	Austria
2	Belgium
3	France
4	Germany
5	Ireland
6	Italy
7	Netherlands
8	Norway
9	Spain
10	Sweden
11	Switzerland
12	UK

Websites and Links	
3D Natives - <a href="https://www.3dnatives.com/en/3d-printing-jobs/">https://www.3dnatives.com/en/3d-printing-jobs/</a>	
3D Printing Industry - <a href="https://jobs.3dprintingindustry.com/">https://jobs.3dprintingindustry.com/</a>	
Adzuna - <a href="http://adzuna.co.uk">adzuna.co.uk</a>	
Alexander Daniels Global - <a href="https://www.alexanderdanielsglobal.com/career-portal/">https://www.alexanderdanielsglobal.com/career-portal/</a>	
Angel.co - <a href="https://angel.co/europe/3d-printing/jobs">https://angel.co/europe/3d-printing/jobs</a>	
Arbetsformedlingen - <a href="https://arbetsformedlingen.se">https://arbetsformedlingen.se</a>	
Careers in Europe - <a href="https://www.careersineurope.eu">https://www.careersineurope.eu</a>	
EURES The European Job Mobility Portal - <a href="https://ec.europa.eu/eures/public">https://ec.europa.eu/eures/public</a>	
Euro Jobs - <a href="https://www.eurojobs.com">https://www.eurojobs.com</a>	
Glassdoor - <a href="http://glassdoor.co.uk">glassdoor.co.uk</a>	
Google Careers - <a href="https://careers.google.com/jobs/">https://careers.google.com/jobs/</a>	
i-Amdigital - <a href="https://i-amdigital.com/">https://i-amdigital.com/</a>	
Indeed - <a href="https://www.indeed.com/q-Europe-jobs.html">https://www.indeed.com/q-Europe-jobs.html</a>	

Indeed.com - <https://www.indeed.com/q-Europe-jobs.html>  
Jobat.be - [jobat.be](https://www.jobat.be)  
Jobs Europe - <https://jobseurope.net>  
LinkedIn - <https://www.linkedin.com>  
Monster - <https://www.monster.co.uk>  
Reed - <https://www.reed.co.uk>  
The Guardian - <https://jobs.theguardian.com/jobs/europe/?Keywords=3D+Printing#browsing>  
Total Jobs - <https://www.totaljobs.com/jobs/3d-printing>

Due to the nature where this project is conducted, the jobs searched appeared within United Kingdom took up a higher percentage, followed by Germany. Among the 10 listed AM Professional Profiles, the top 5 AM Professional Profiles with the highest job vacancies is AM Designer (26 vacancies), AM Operator/Technician (21 vacancies), AM Coordinator (14 vacancies), AM Process Engineer (8 vacancies), followed by NDT Technician and Metrology Engineer (both 3 vacancies each). There is no result regarding job vacancies for Inspection Technician, however, few AM Professional Profiles appeared to have overlapped role of an Inspection Technician, such as the AM Process Engineer (Figure 3), the AM Coordinator (Figure 4) and AM Operator/ Technician (Figure 5).

The searched AM jobs were carefully referenced, but not limited to the given 10 Professional Profiles groups defined for the SAM project. A total of 126 AM jobs were identified and then carefully categorised into 11 groups (refer to appendix 1 Table, 2 – 5). They were grouped into (1) AM Designer, (2) AM Process Engineer, (3) AM Inspector, (4) Inspection Technician, (5) NDT Technician, (6) AM Supervisor, (7) AM Coordinator, (8) Metrology Engineer, (9) Materials Engineer, (10) AM Operator/ Technician. Other disciplines working in AM that do not fit in the existing 10 Professional Profiles are allocated under Group (11) – Others.

### In a nutshell

From the list of collected results, it was found that **75 jobs belonged to the existing 10 AM Professional Profiles** while 30 jobs fell under 9 specialisations allocated under group 11 – ‘Others’. These 9 areas of specialisations include:

- (11) Development and Project Management
- (12) Operational Division
- (13) Laboratory
- (14) Software and Firmware Technician (Table 6)
- (15) Technical Support and Customer Service
- (16) Benchmarking Initiatives
- (17) Service Engineer
- (18) Software Engineer
- (19) Technological Development and Project Innovation

*(refer to appendix 1 -Table 7)*

In Appendix 1 “Data collection from Human Resources and Job Listings”, Table 2 – 7 summarised the collected results based on the data from recruitment adverts and other available statistics. The terms and descriptions of the 10 Professional Profiles groups defined for the SAM project remained unchanged. Each group is colour coded to easily tell the difference between groups, especially used in differentiating any key overlapping roles between AM Professional Profiles in the Venn Diagrams. The Venn Diagrams illustrated in Table 2 – 7 was used to visualise the key overlapping responsibilities between the identified AM Professional Profiles. The types of overlapping responsibilities and tasks can be referred to in their respected group in the Appendix using the stated Reference number (Ref No.). The tasks from any

overlapping AM Professional Profile have also been highlighted with their respective colour under the job descriptions.

The findings from online recruitment adverts, AM industry company vacancies websites, employment-oriented service, LinkedIn, and other statistics available online have enabled to map out the relevant jobs, employment, workforce and employability in the current AM Industry. Figure 2 is a Gantt diagram showing the complete list of jobs that do not fit into the 10 listed AM Professional Profiles. They can be further categorised into 9 areas of specialism including (11) Business Development and Project Management, (12) Operational Division, (13) Laboratory, (14) Software and Firmware Technician (Table 6), (15) Technical Support and Customer Service, (16) Benchmarking Initiatives, (17) Service Engineer, (18) Software Engineer, (19) Technological Development and Project Innovation (Table 7).

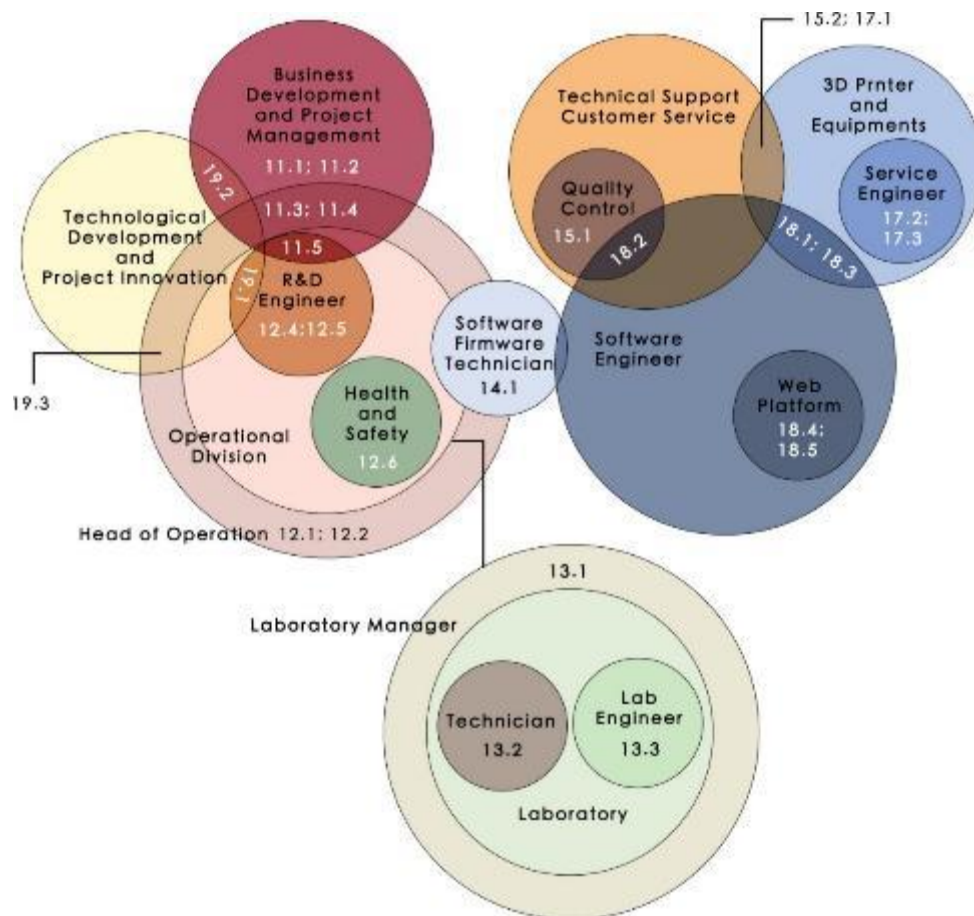


Figure 2: Venn diagram showing other types of AM Professional Profiles

In the appendix 2 “Details on Data Collection per Professional Profile”, Table 8 –14 summarised the data from recruitment adverts and other available statistics according to the group of Professional Profiles from 1 to 11.

## 5. Overlapping and progression between Professional Profiles

From this study, the major conclusions regarding overlapping and progression between Professional Profiles are the following:

i. The role of the (11) Business Development and Project Management and (19) Technological Development and Project Innovation Professionals are most likely to work together with the (1) AM Designer, (2) AM Process Engineer and (7) AM Coordinator.

ii. The operational division could be missing a leadership role, for instance, the Head of Operation and Production (12.1 – 12.3), who is the leader of operation staff and responsible for the smooth running of all production steps could be a position above the AM Supervisor, however not involved in developing and executing specific AM Process Plans like an AM Process Engineer.

iii. The health and safety officer role that ensures the safe operations of manufacturing, service and customer support activities within the division should be considered. This role would be to ensure compliance of all relevant H&S policies relating to the company's activities, ensuring ongoing compliance with company's policies and procedures. To also implement and carry out divisional audit plans related to AM, conducting any follow-up activities as required and to undertake risk assessments and generate reports to local management and the Corporate H&S team on a regular basis (12.6).

iv. AM Professionals should also include lab managers, lab technicians, lab engineers that work in a laboratory setting mainly to enhance, optimise AM machine components, materials and processes (if a laboratory is present within the company) (13).

v. Software AM Professionals such as Software Engineers and Technicians that involve in machine learning and upgrading software (14.1) or developing new software for production use and quality control (18.1 – 18.2), or web platform (18.4) should also be considered as an AM profile.

vi. Technical support and customer support professionals, including quality control (15), as well as Field-service technicians (Service Engineers) (17.1 – 17.3), should also be considered as an AM profile.

### In a nutshell

The provided list of AM and other Professional Profiles can be classified into **Management and Technical roles**.

- Management roles in AM include AM Supervisor (6.1), Business Development and Project Management (11.1 – 11.4), Head of Operation (12.1 – 12.2) and Laboratory Manager (13.1 – 13.2)
- Technical AM Professional Profiles are AM Process Engineer, AM Inspectors, Inspection Technician, NDT Technician, AM Coordinator, Metrology Engineer, Material Engineer, AM Operator Technician, Technical Product Support (15.1), Customer Service professionals (15.2) and AM Designer.



## 6. Currently available Training in AM

SAM project has mapped the currently available training for AM, independently from the type, level or country in which it is implemented. This map took into consideration the previous courses already mapped by AM Motion in 2018 and presents only new initiatives from the ones on the AM Motion List<sup>2</sup>. Appendix 3 – Currently Available AM Training Courses – refers only to the ones not mapped in AM Motion.

At the moment, there are 97 courses being implemented in AM (mainly in the UK, as shown in Figure 3), ranging from EQF level 4 to 8. It was also possible to assess that the majority of the courses are dedicated to PHD level (EQF level 8) – see Figure 2, but this is easily understandable, as AM is such an innovative technology, currently being investigated in several universities. Short courses, seminars, summers schools and workshops are also very popular, in total they represent 48% of all the mapped available courses (Figure 4).

It is possible to conclude that there are several types of courses being implemented for the different levels of education, the capacitation approach of AM professionals is not consistent, lacking the harmonisation and consequent recognition of knowledge and skills. The survey to be developed in the framework of WP2 will allow to identify the AM training practices in order to characterize the training being provided in AM (in terms of duration, type of courses and methodologies applied to training and assessment).

The information about the courses in AM will be available, at an initial stage, in the project website, and later in the observatory. The aim is to keep it up to date on an annual basis.

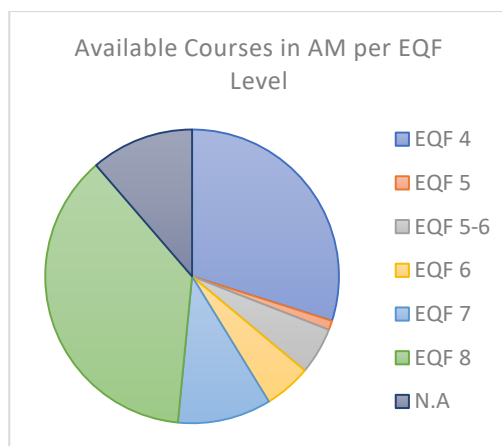


Figure 2: Available courses in AM per EQF Level

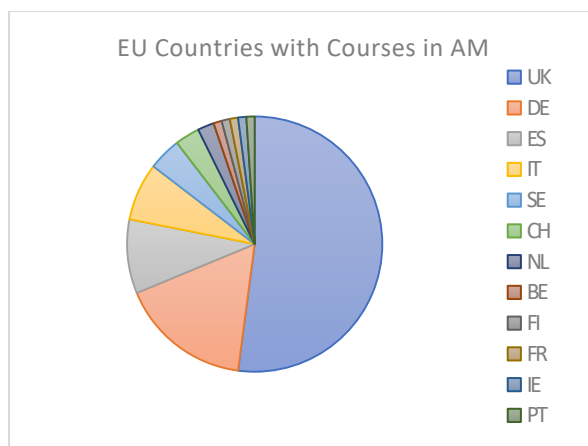


Figure 3: EU countries with courses in AM

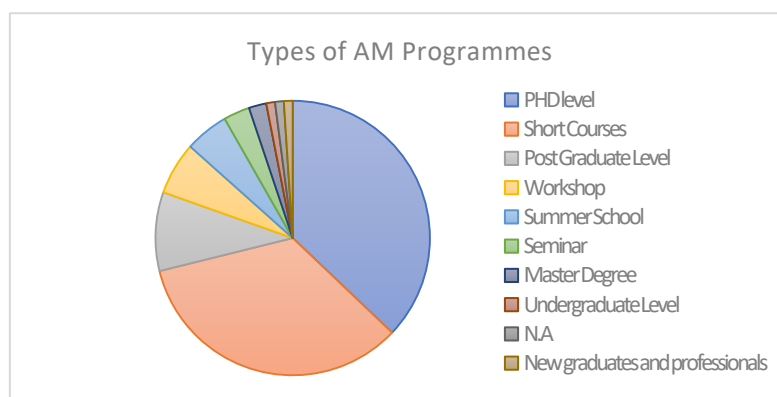


Figure 4: Types of AM programmes

<sup>2</sup> [https://www.am-motion.eu/images/D3.6\\_Mapping\\_AM\\_educational\\_initiatives\\_FINAL.PDF](https://www.am-motion.eu/images/D3.6_Mapping_AM_educational_initiatives_FINAL.PDF)

## 7. Future Work

This report maps the professions working in Additive Manufacturing in 2019. At this stage, targeted surveys and interviews with AM companies, research centres, training centres and end-users are being undertaken under Work Package 2. While report maps existing professions in the industry today, there are a growing number of papers that provide an insight into the future of additive manufacturing from an economic and policy perspective, including predictions regarding the economic impact of this technology (Baumers et al., 2016). For example, Jiang, Kleer and Piller (2017) predict that “in 2030, manufacturing of spare parts will be divided into two systems: less critical parts will be produced locally via additive manufacturing, whereas critical parts will be made at specialist hubs with specific qualification/quality control skills, primarily using conventional manufacturing techniques; as well as a significant amount of small and medium enterprises will share industry-specific additive manufacturing production resources to achieve higher machine utilization, learning effects, quality assessments, etc.” These predictions may provide a reference when mapping out professional profiles for the AM industry in the future. In addition, Annunziata and Bourgeois (2018) suggested that more effort should be devoted to understanding new skills that will be needed and how current jobs will change. They also suggested education schemes to upgrade workers, reforming labour market institutions to be better prepared where workers will change jobs and employers more frequently, and reforming social benefit systems and bolstering social safety nets during the transition period especially for the worst-affected workers.

The next steps within the project will consist of the following activities:

- further exploiting of the existing and emerging AM Professional Profiles and skills, in WP2, including the detailed analysis of overlapping skills among certain Professional Profiles to be addressed in next 6 months (2019 – Real case scenarios), 2 years (2020-2021 - Short term scenarios) and 10 years (2022-2030 - Foresight scenarios);
- design of AM qualifications, in WP3 and WP5, ensuring that in the case of overlapping skills, the curriculum development will enable the development of different skills adjusted to the specific needs of each profile, thus avoiding repetition of content / or the inclusion of content which are not relevant to certain professionals.

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### 9. Appendix 1: Data Collection from Human Resource and Job Listings

No.	1 (More info @ Table 8)	2 (More info @ Table 9)	3 (More info @ Table 10)
Name of Professional Profile	AM Designer	AM Process Engineer	AM Inspector
Numbers of relevant job searched	26	8	1
Key Overlapping Role(s)			

	2D-3D CAD Modeller	AM Designer	Mechanical Design Engineer	Mechanical Engineer	AM Process Engineer	AM Inspector
<b>Other Names</b>	<ul style="list-style-type: none"> <li>• 2D and 3D Engineer</li> <li>• 3D CAD Engineer (3D Printing)</li> <li>• CAD Technician</li> <li>• 3D/ CAD Modeller</li> <li>• Computational Designer</li> <li>• CAD Prototyping Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Design for AM</li> <li>• Additive Manufacturing Design Engineer</li> <li>• AM Design Engineer</li> <li>• Design and Manufacturing Engineer</li> <li>• Product Design Engineer</li> <li>• Additive Design Engineer</li> <li>• Manufacturing Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanical Design/ Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• AM Mechanical Engineer</li> <li>• Development Engineer Additive Manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>• Additive Manufacturing Engineer</li> <li>• Advanced Manufacturing Engineer</li> <li>• Senior Engineering Project Manager</li> <li>• Product and Process Manager Additive Manufacturing</li> <li>• Junior Manufacturing Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Additive Manufacturing (AM)- Employee Quality Assurance</li> </ul>

Table 2: (1) AM Designer, (2) AM Process Engineer, (3) AM Inspector.

No.	4 (More info @ Table 10)	5 (More info @ Table 10)	6 (More info @ Table 10)
<b>Name of Professional Profile</b>	<b>Inspection Technician</b>	<b>NDT Technician</b>	<b>AM Supervisor</b>
<b>Numbers of relevant job searched</b>	0	3	1
<b>Key Overlapping Role(s)</b>			
<b>Other Names</b>	Inspection Technician	NDT Technician	AM Supervisor
	N/A	<ul style="list-style-type: none"> <li>• Prototyping Mechanist Engineer</li> <li>• Mechanical Technician/ Workshop Technician</li> </ul>	N/A

Table 3: (4) Inspection Technician, (5) NDT Technician, (6) AM Supervisor.

<b>No.</b>	7 (More info @ Table 11)	8 (More info @ Table 12)	9 (More info @ Table 12)
<b>Name of Professional Profile</b>	AM Specialist/Coordinator	Metrology Engineer	Materials Engineer
<b>Numbers of relevant job searched</b>	14	3	2
<b>Key Overlapping Role(s)</b>			
<b>Other Names</b>	<p>AM Specialist</p> <ul style="list-style-type: none"> <li>• 3D Printing Applications Engineer</li> <li>• 3D Printing Customer Project Fulfilment Specialist</li> </ul>	<p>Metrology Engineer</p> <ul style="list-style-type: none"> <li>• 3D Printing Prototyping Engineer</li> </ul>	<p>Materials Engineer</p> <ul style="list-style-type: none"> <li>• Experimental Technologist 3D Printing</li> </ul>



	<ul style="list-style-type: none"> <li>• Technical Specialist</li> <li>• Manufacturing Engineer</li> <li>• Mechanical/ Mechatronics/ Electronics Engineer</li> <li>• Production Development Engineer</li> <li>• 3D Printing Metals Process Engineer</li> <li>• Sales Application Engineer (SAE)</li> <li>• R&amp;D &amp; Customer Loyalty Engineer</li> <li>• Customer Project Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• Research Engineer for Additive Manufacturing</li> </ul>	
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Table 4: (7) AM Specialist, (8) Metrology Engineer, (9) Materials Engineer.

<b>No.</b>	10 (More info @ Table 13)
<b>Name of Professional Profile</b>	AM Operator/ Technician
<b>Numbers of relevant job searched</b>	21
<b>Key Overlapping Role(s)</b>	<ul style="list-style-type: none"> <li>• AM Supervisor</li> <li>• AM Process Engineer</li> <li>• AM Designer</li> <li>• AM Inspector</li> </ul>

<b>Other Names</b>	<b>AM Operator/ Technician</b>	<b>Production Manager</b>
	<ul style="list-style-type: none"> <li>• Processing Technician</li> <li>• 3D Printing Technician</li> <li>• 3D Printing Engineer</li> <li>• Additive Manufacturing Technician</li> <li>• Model Maker Technician</li> <li>• Production Engineer</li> <li>• Production Technologist</li> <li>• Specialist Additive Manufacturing Processes (Technician – Mechanical Engineering)</li> <li>• Technical Operator</li> <li>• Production Employee</li> <li>• Rapid Prototype Finisher</li> <li>• Production Worker 3D Printing</li> </ul>	<ul style="list-style-type: none"> <li>• Director of Design Prototyping</li> <li>• Production Manager for Printing and Finishing</li> </ul>

Table 5: (10) AM Operator/ Technician.

Others (More info @ Table 14)				
No.	11	12	13	14
Category	System Development and Project Management	Operational Division	Laboratory	Software and Firmware Technician
Area of Specialism	<ul style="list-style-type: none"> <li>• System Product Manager (11.1)</li> <li>• Applications Engineering Manager (11.2)</li> <li>• Project Management (AM value chain) (11.3)</li> <li>• Business Development Manager (11.4)</li> <li>• R&amp;D Project Management (11.5)</li> </ul>	<ul style="list-style-type: none"> <li>• Head of 3D Printing (12.1)</li> <li>• Leader of Staff and Operations (12.2)</li> <li>• Head of Production (12.3)</li> <li>• Support Development (12.4; 12.5)</li> <li>• Health and safety Management (12.6)</li> </ul>	<ul style="list-style-type: none"> <li>• Laboratory Manager (13.1)</li> <li>• Laboratory Manager – Technician (13.2)</li> <li>• Lab Engineer (13.3)</li> <li>• Junior Technician/ Apprentice (13.4)</li> </ul>	<ul style="list-style-type: none"> <li>• Machine Learning and Update (14.1)</li> </ul>
Name of Professional Profile	<ul style="list-style-type: none"> <li>• System Product Manager (11.1)</li> <li>• Additive Engineering Program Manager – Life Sciences (11.2)</li> <li>• Applications Engineering Manager (11.3)</li> <li>• 3D Printing Vertical Business Development Manager (11.4)</li> <li>• Project Manager Additive Manufacturing (Chemist) (11.5)</li> </ul>	<ul style="list-style-type: none"> <li>• Head of 3D Printing (12.1)</li> <li>• Project Manager (12.2)</li> <li>• Development Engineer (12.3)</li> <li>• R&amp;T Engineer Additive Manufacturing (12.5)</li> <li>• Health and Safety Officer (12.6)</li> </ul>	As above.	<ul style="list-style-type: none"> <li>• Machine Learning Engineer</li> </ul>
Description of Professional Profile	Refer to Ref No.11.1 – 11.5 for the job description of each Professional Profile grouped under <b>System Development and Project Management</b> (Table).	Refer to Ref No.12.1 – 12.6 for the job description of each Professional Profile grouped under <b>Operational Division</b> .	Refer to Ref No.13.1 – 13.4 for the job description of each Professional Profile grouped under <b>Laboratory</b> .	Refer to Ref No.14.1 for the job description of each Professional Profile grouped under <b>Software and Firmware Technician</b> .
Numbers of relevant job searched	9	6	4	1
Key Overlapping Role(s)	<ul style="list-style-type: none"> <li>• Head of Operation</li> <li>• R&amp;D Engineer</li> </ul>	<ul style="list-style-type: none"> <li>• AM Process Engineer</li> <li>• AM Designer</li> <li>• AM Coordinator</li> <li>• AM Technician</li> <li>• NDT Technician</li> </ul>	<ul style="list-style-type: none"> <li>• AM Supervisor</li> </ul>	<ul style="list-style-type: none"> <li>• Software Engineer</li> </ul>

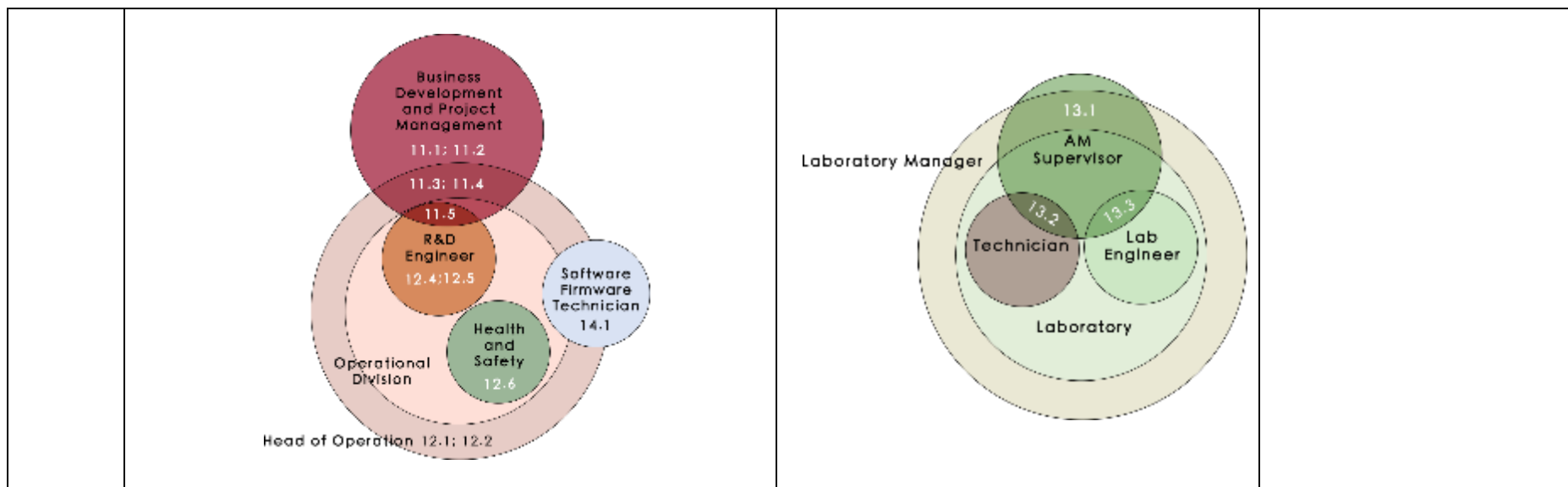


Table 6: Others (11) System Development and Project Management, (12) Operational Division, (13) Laboratory, (14) Software and Firmware Technician.

Others (More info @ Table 14)					
No.	15	16	17	18	19
Category	Technical Support and Customer Service	Benchmarking Initiatives	Service Engineer	Software Engineer	Technological Development and Project Innovation
Area of Specialism	<ul style="list-style-type: none"> <li>Product Quality Control (15.1)</li> <li>3D Printer and Equipment (15.2)</li> </ul>	<ul style="list-style-type: none"> <li>Benchmarking Initiatives (16.1)</li> </ul>	<ul style="list-style-type: none"> <li>AM Service Engineer (17.1)</li> <li>AM Service Engineer Quality Control (17.2; 17.3)</li> </ul>	<ul style="list-style-type: none"> <li>3D Printing Software Products (18.1)</li> <li>3D Printing Software for Quality Control (18.2)</li> <li>3D Printing Software (18.3)</li> <li>Web Platform/ Server Technology (18.4; 18.5)</li> </ul>	<ul style="list-style-type: none"> <li>Technological development (19.1)</li> <li>AM Projects Innovation (19.2; 19.3)</li> </ul>
Name of Professional Profile	<ul style="list-style-type: none"> <li>Technical Product Support (15.1)</li> <li>3D Printer Technician (Technical Support) (15.2)</li> </ul>	<ul style="list-style-type: none"> <li>Product Owner for AM Benchmarking Initiatives (16.1)</li> </ul>	<ul style="list-style-type: none"> <li>Service Technician Digital Printing (17.1)</li> <li>AM Service Engineer (17.2)</li> <li>Field Service Engineer (17.3)</li> </ul>	<ul style="list-style-type: none"> <li>Software Product Manager – 3D Printing (18.1)</li> <li>Software Engineer (18.2; 18.3)</li> <li>Full-stack Software Engineer (18.4)</li> </ul>	<ul style="list-style-type: none"> <li>Technology Manager Binder Jetting (19.1)</li> <li>AM Innovation Specialist (19.2)</li> <li>Innovation Engineer (19.3)</li> </ul>

				• Internship in the field of network and server technology (18.5)	
<b>Description of Professional Profile</b>	Refer to Ref No.15.1 – 15.2 for the job description of each Professional Profile grouped under <b>Technical Support and Customer Service</b> .	Refer to Ref No.16.1 for the job description of each Professional Profile grouped under <b>Benchmarking Initiatives</b> .	Refer to Ref No.17.1 – 17.3 for the job description of each Professional Profile grouped under <b>Service Engineer</b> .	Refer to Ref No.18.1 – 18.5 for the job description of each Professional Profile grouped under <b>Software Engineer</b> .	Refer to Ref No.19.1 – 19.3 for the job description of each Professional Profile grouped under <b>Technological Development and Project Innovation</b> .
<b>Numbers of relevant job searched</b>	7	1	7	7	5
<b>Key Overlapping Role(s)</b>	–	• AM Coordinator	–	• Software and Firmware Technician	• Software Engineer

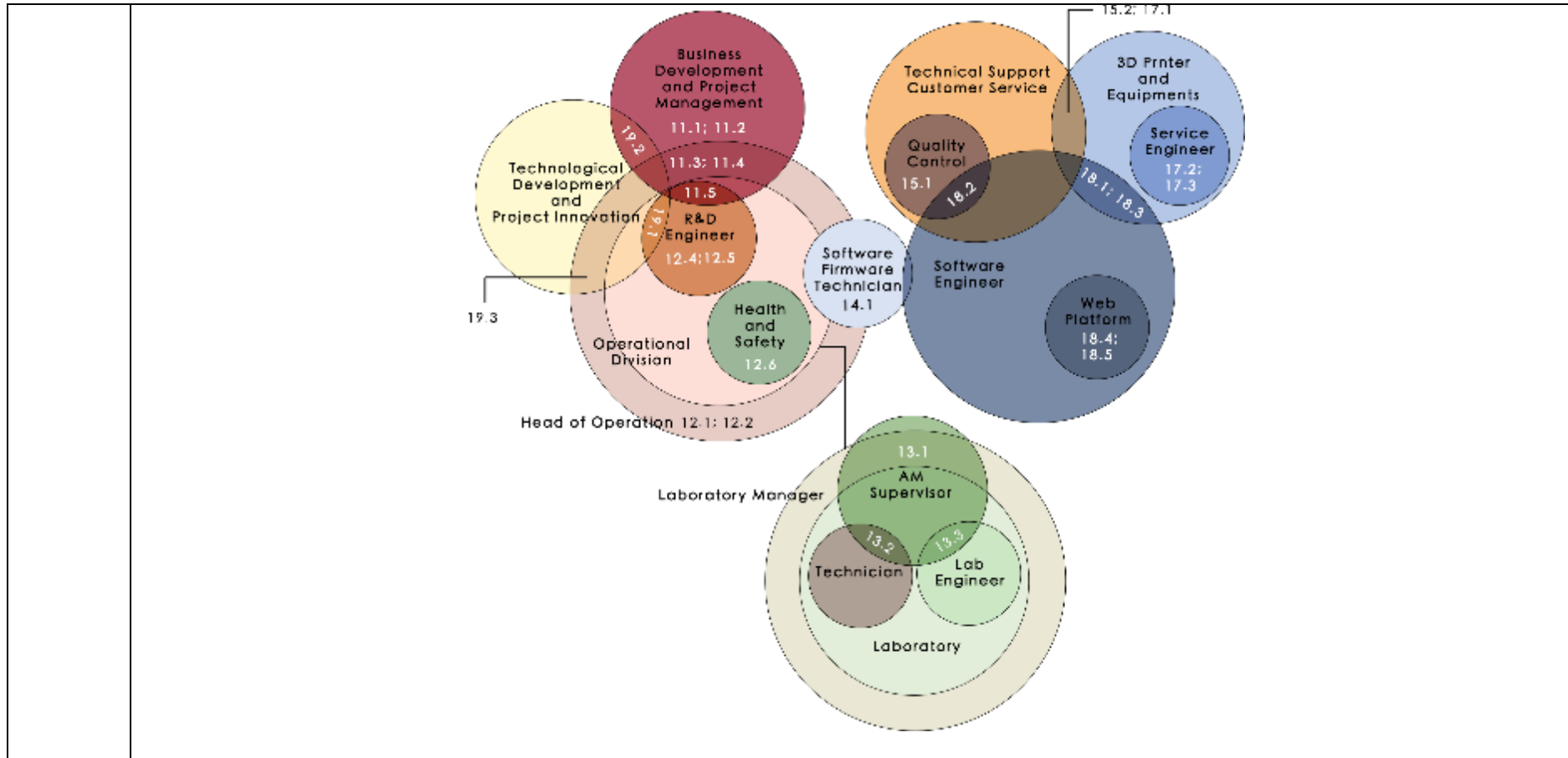


Table 7: Others (15) Technical Support and Customer Service, (16) Benchmarking Initiatives, (17) Service Engineer, (18) Software Engineer, (19) Technological Development and Project Innovation.

## 10. Appendix 2: Details on Data Collection per Professional Profiles

Each searched results of the recruitment adverts are documented according to their groups from 1 to 11. The details including the link to the advertised jobs together with the name of the company, contact details of Human Resource (HR) professionals or Recruitment agency in-charged is attached under the 4th and 5th columns – Website (Link) and Recruiter/ Company Name for the interview stage of this project. The 6th column indicates the Country, location of the job. In column 8 the job descriptions and tasks for each role is also documented for further reference and comparison to the written “Description of Professional Profile”. Meanwhile, any additional tasks that is not mentioned in the written “Description of Professional Profile” is suggested in column 9. The Ref No. is used to trace the specific listed job, particularly from the Venn Diagram.

### Appendix List

No.	Name of Professional Profile	Table
1	AM Designer	8
2	AM Process Engineer	9
3	AM Inspector	10
4	Inspection Technician	10
5	NDT Technician	10
6	AM Supervisor	10
7	AM Coordinator	11
8	Metrology Engineer	12
9	Materials Engineer	12
10	AM Operator/ Technician	13
11	Others	14

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
1	<b>AM Designer</b> - Professionals that are able to design parts optimised for function, cost and manufacture.	Design AM solutions for specific AM process ensuring and validating that parts can be made cost-effective and efficiently; Validate specific AM process design projects by verifying requirements for production with engineer as well as process requirements, ensuring liaison with other technical areas to sign of drawings.	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MT1ONzE5MDQwMDAwMzkMjYx">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MT1ONzE5MDQwMDAwMzkMjYx</a>	Karsten Mohol	Hordaland, Norway	Technical Drawing-machine drawing 2D and 3D Engineer	<ul style="list-style-type: none"> <li>• Prepare 2D machine drawings and 3D models, production bases and associated parts lists for mechanical equipment.</li> <li>• Close collaboration with project managers, product owners and departments.</li> <li>• Support production.</li> <li>• Identify and establish collaboration with players in additive manufacturing.</li> <li>• 3D printing with our own plastic 3D printer.</li> <li>• Some development of new products.</li> <li>• Ability to perform tasks with 3D scanner.</li> <li>• Contribute to the development of the Engineering department qualifications.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and establish collaboration with players in additive manufacturing.</li> <li>• Some development of new products.</li> </ul>		<ul style="list-style-type: none"> <li>• Relevant technical certificate, technical vocational school, engineer.</li> <li>• Good practical insight and interdisciplinary technical interest.</li> </ul>	1.1
			<a href="https://www.linkedin.com/jobs/view/1378626570/">https://www.linkedin.com/jobs/view/1378626570/</a>	Stratasys	-	3D CAD Designer (3D Printing)	<ul style="list-style-type: none"> <li>• Working with 3D modelling software to create new exciting models and sample parts.</li> <li>• Participating in creation of new applications and tools for 3D printing world.</li> <li>• Operating the systems from file pre-processing and model post processing.</li> </ul>	<ul style="list-style-type: none"> <li>• Participating in creation of new applications and tools for 3D printing world.</li> </ul>	AM Technician	<ul style="list-style-type: none"> <li>• Degree of Engineering/Design</li> <li>• Strong design skills and mastering of Rhino, Grasshopper or any kind of CAD like SolidWorks.</li> <li>• Experience with STL file validation / repair software.</li> </ul>	1.2



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>• Experience on operating 3D printing.</li> <li>• Good technical understanding of multidisciplinary equipment.</li> </ul>	
			<a href="https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=2158227941725935&amp;vjk=a52e006d328635ef">https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=2158227941725935&amp;vjk=a52e006d328635ef</a>	ALLpaQ	Widnes, UK	CAD Technician	<ul style="list-style-type: none"> <li>• Maintain and update drawings with new revisions and configurations.</li> <li>• Reporting to line manager.</li> <li>• Produce achievable designs following customers design brief.</li> <li>• Produce costing breakdowns for new designs.</li> <li>• Aid the sales team by providing technical data and sales media.</li> <li>• FDM 3D print prototyping.</li> <li>• CNC router programming for new designs.</li> <li>• Produce new and manipulate existing graphics for UV printing and other applications.</li> </ul>	<ul style="list-style-type: none"> <li>• Aid the sales team by providing technical data and sales media.</li> <li>• the production of prototype.</li> </ul>		<ul style="list-style-type: none"> <li>• Strong 3D CAD knowledge (Primarily Solidworks).</li> <li>• Solid modelling</li> <li>• Drawings configurations</li> <li>• Photoview 360</li> <li>• FEA</li> <li>• Intermediate understanding of CNC programming</li> </ul>	1.3
			<a href="https://angel.co/company/itoma-1/jobs/531812-3d-cad-modeller-for-">https://angel.co/company/itoma-1/jobs/531812-3d-cad-modeller-for-</a>	Itoma <a href="https://itoma.co.uk/our-team/">https://itoma.co.uk/our-team/</a>	UK	3D/ CAD Modeller	<ul style="list-style-type: none"> <li>• Define best process to make 2D into 3D and then make it printable (e.g. make manifold, add thickness &amp; right size).</li> </ul>			<ul style="list-style-type: none"> <li>• Experience in 3D Modelling &amp; CAD plus interest / experience with 3D Printing.</li> <li>• Photogrammetry or python.</li> </ul>	1.4

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			innovative-3d-printing								
			<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm</a>	Bryden Wood  (Architecture)	London, UK.	Computational Designer  (Digital delivery team)	<ul style="list-style-type: none"> <li>• Parametric modelling</li> <li>• Generative design algorithms (including machine learning)</li> <li>• Digital Manufacturing (including 3D printing and CNC).</li> <li>• Simulation-driven design.</li> <li>• Data analysis and visualisation.</li> </ul>			<ul style="list-style-type: none"> <li>• Master's degree in Architecture and/or Engineering, with a specialised in Computational Design.</li> <li>• Visual Programming (e.g. Grasshopper, Dynamo, node-RED)</li> <li>• Programming (e.g. C#, Python)</li> <li>• Web development (e.g. Javascript)</li> <li>• Database technologies</li> </ul>	1.5
			<a href="https://www.totaljobs.com/job/prototyping-engineer/orion-electrotech-ltd-job87554772?WT.mc_id=A_RE_AD_ZPPC_MP1_">https://www.totaljobs.com/job/prototyping-engineer/orion-electrotech-ltd-job87554772?WT.mc_id=A_RE_AD_ZPPC_MP1_</a>	Orion Electrotech Ltd (Agency)	Oxfordshire, UK.	CAD/CAD Prototyping Engineer	<ul style="list-style-type: none"> <li>• Iterate new concepts, developing them into products.</li> <li>• Prototyping designs in house using various processes.</li> <li>• Creating application specific test rigs in order to make testing efficient, repeatable and standardised, this may involve some electronics and programming.</li> <li>• Work with other engineers to critically assess key aspects of new</li> </ul>	<ul style="list-style-type: none"> <li>• Creating application specific test rigs for testing.</li> </ul>	NDT Technician	<ul style="list-style-type: none"> <li>• Experience working in an engineering workshop.</li> <li>• Experience with CAM and CNC machining.</li> <li>• Able to use parametric CAD.</li> <li>• Analytical mind and ability to troubleshoot issue</li> </ul>	1.6

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			C12_22_TJ_adz_2011-3&utm_source=adzuna&utm_medium=adzuna				<p>designs and create test plans to prove them out.</p> <ul style="list-style-type: none"> <li>Carry out test plans and share results with the team, informing future iterations of designs.</li> </ul>			<p>logically and quickly.</p> <ul style="list-style-type: none"> <li>Experience scripting in Python</li> <li>Experience in programming using Arduino.</li> <li>Experience with electronics (breadboarding / soldering).</li> </ul>	
			<a href="https://www.alexanderdanielsglobal.com/career-portal/">https://www.alexanderdanielsglobal.com/career-portal/</a>	Alexander Daniel Global (Recruiter)	Spain	Design for AM	<ul style="list-style-type: none"> <li>Acting as a focal point for projects to get AM parts designed and manufactured.</li> <li>Collect and understand requirements for the AM parts requested.</li> <li>Define a suitable manufacturing process for the parts, especially focused on post processing.</li> <li>Provide a chargeable cost (internal) for the job, and gain project approval for work.</li> <li>Work with process engineers to enable manufacture in house of the parts.</li> <li>Prepare CAD / CAM data for the part in accordance with the customer requirements.</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>Knowledge of design and process simulation tools.</li> <li>Hands on experience in 3D Printing technologies (MJF, FDM etc.).</li> <li>Design engineering degree.</li> <li>Understanding of manufacturing processes.</li> </ul>	1.7

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>Hold design and progress reviews with the customer to ensure requirements are met.</li> </ul>				
			<a href="https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MDg1Njc1NCA5?jvDisplayLanguage=fr">https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MDg1Njc1NCA5?jvDisplayLanguage=fr</a>	AKKA Technologies	Guyancourt, France	Additive Manufacturing Design Engineer	<ul style="list-style-type: none"> <li>Designing optimized and light structures (bio-inspired), using tools: design, sizing (topological, topographical, parametric optimization ...) and processes.</li> <li>innovative manufacturing (additive manufacturing).</li> </ul> <p>In a team of R &amp; D, you also contribute:</p> <ul style="list-style-type: none"> <li>to the assembly and realization of technical training,</li> <li>editing, monitoring and implementation of R &amp; D projects (search for industrial partners, methods of financing).</li> </ul>	<ul style="list-style-type: none"> <li>editing, monitoring and implementation of R &amp; D projects (search for industrial partners, methods of financing).</li> <li>participation in commercial actions defined by those responsible sales support.</li> </ul>		<ul style="list-style-type: none"> <li>Doctorate at Dominant Mechanics.</li> <li>Good skills in designing mechanical structures.</li> <li>Solid foundations in volumetric design.</li> <li>Knowledge of optimization calculus.</li> <li>Topological, materials and processes of additive manufacturing.</li> <li>CAD (type CATIA V5 / V6, 3DEXperience, SolidWorks ...),</li> </ul>	1.8

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>• participation in commercial actions defined by those responsible sales support.</li> <li>• support for production units and the production of prototype via a 3D printer.</li> </ul>	<ul style="list-style-type: none"> <li>• the production of prototype.</li> </ul>		<ul style="list-style-type: none"> <li>• INSPIRE for redesign and tool 3matic,</li> <li>• Data Preparation for Additive Manufacturing (type Magics 3D, IdeaMaker ...).</li> <li>• Concepts of finite element structure calculation would be a plus.</li> </ul>	
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTE5ODYwMjEgNDM">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTE5ODYwMjEgNDM</a>	Primetals Technologies	Wels, Austria	AM Design Engineer	<ul style="list-style-type: none"> <li>• Component design taking into account the possibilities of Additive Manufacturing (AM).</li> <li>• Development of repair solutions taking into account the AM possibilities.</li> <li>• Continuous implementation of improvements in coordination with the production.</li> <li>• simulation (simulation driven design / topology optimization).</li> <li>• Creation of standard production drawings, the corresponding parts lists and their structure.</li> <li>• Implementation of feasibility studies in relation to additive manufacturing in the Cooperation with engineering and service departments.</li> </ul>			<ul style="list-style-type: none"> <li>▪ Technical training (HTL, FH, TU) in the field of mechanical engineering.</li> <li>▪ Several years of professional experience in the design and product development of additively manufactured Metal components.</li> <li>▪ Routine handling of CAD programs (preferably Siemens NX, Solid Edge and Autodesk Inventor).</li> <li>• Experience in additive</li> </ul>	1.9

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>• Cooperation with external partners.</li> <li>• Evaluation, analysis and preparation of internal and external data.</li> </ul>			<p>manufacturing and topology optimization.</p>	
			<p><a href="https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=b098078b7feb0cae">https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=b098078b7feb0cae</a></p> <p><a href="https://www.reed.co.uk/jobs/design-manufacturing-engineer-chalgrove-">https://www.reed.co.uk/jobs/design-manufacturing-engineer-chalgrove-</a></p>	<p>Better People Ltd</p>	<p>Chalgrove, UK</p>	<p>Design Engineer</p> <p>Design and Manufacturing Engineer</p>	<ul style="list-style-type: none"> <li>• Taking proven prototyped concepts and turning them into ready to manufacture products.</li> <li>• You work with suppliers will be to refine designs and processes to meet the high standards of existing products and improve efficiency.</li> </ul>			<ul style="list-style-type: none"> <li>• Experienced at 3D CAD creating technical drawings.</li> <li>• Will be experienced at designing parts for mass manufacturing processes, particularly turning and milling.</li> <li>• Able to communicate collaboratively with a wide range of people from different disciplines.</li> <li>• Desirable but not essential is experience of</li> </ul>	<p>1.10</p>

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			ox44/38492772?source=searchResults#/jobs/3d-printing-jobs							Injection moulding, die casting, sheet metal, extrusion MIM and Powder metallurgy. <ul style="list-style-type: none"> <li>• Engineering degree AND OR experience in a relevant similar role is definitely an advantage.</li> </ul>	
			<a href="https://www.adzuna.co.uk/jobs/details/1245899169?searchResults#/jobs/3d-printing-jobs">https://www.adzuna.co.uk/jobs/details/1245899169?searchResults#/jobs/3d-printing-jobs</a>	PRG  Immy Haines:  i.haines@ioassociates.co.uk	Cheltenham, UK.	Senior Product Design Engineer	<ul style="list-style-type: none"> <li>• Responsible for generating new concepts, CAD design, rapid prototyping using their state-of-the-art 3D printing technology, graphic design and manufacturing products using a range of different materials, from plastic injection moulded products through to mechanical and electronic solutions.</li> </ul>			<ul style="list-style-type: none"> <li>• 5+ years' experience in a product design position.</li> <li>• Good knowledge on multiple manufacturing processes.</li> <li>• SolidWorks.</li> <li>• Experience developing products for mass production</li> </ul>	1.11

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.linkedin.com/jobs/view/1418612144/">https://www.linkedin.com/jobs/view/1418612144/</a>	Strucker	Carrigwohill, Ireland	Additive Design Engineer	<ul style="list-style-type: none"> <li>• Collaborate with divisional R&amp;D and AO to understand product requirements and use additive design methodologies to improve performance of new and existing products.</li> <li>• Provide engineering support for new product and process introductions, ensuring that all activities are completed and documented in accordance with the Stryker new product development procedures.</li> <li>• Ensure quality of process and product as defined in the appropriate operation and material specifications.</li> <li>• Model and detail implant and instrument designs utilizing CAD software.</li> <li>• Develop prototypes for design verification and validation.</li> <li>• Actively participate on, and sometimes lead, cross-functional design teams to develop new product, address design issues, and maintain existing designs.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop prototypes for design verification and validation.</li> </ul>	AM Inspector	<ul style="list-style-type: none"> <li>• B.S in Mechanical Engineering or related engineering discipline with 0-2 years of experience.</li> <li>• Strong CAD software knowledge (Pro-E, Solidworks, CATIA, etc.)</li> <li>• Working knowledge of finite element analysis (FEA) software.</li> </ul>	1.12



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/YTQxM2E1OWYtNzE1Zi00ZDhlTgxYzQtZDNhMzU3OTI2NDhjldM?jvDisplayLanguage=nl">https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/YTQxM2E1OWYtNzE1Zi00ZDhlTgxYzQtZDNhMzU3OTI2NDhjldM?jvDisplayLanguage=nl</a>	AGO Technics	Wondelgem, Belgium.	Manufacturing Engineer	<ul style="list-style-type: none"> <li>• When you receive new projects from your customers, you are responsible for their realization via 3D design.</li> <li>• You ensure that this 3D design matches the wishes and needs of the customer, both electrically and mechanically.</li> <li>• You prepare the work preparation (defining the process flow, materials, tools, tools and production times, ...).</li> <li>• You follow up the prototypes made in the production.</li> <li>• As soon as the project is ready to go into production, you ensure that the operators receive all necessary instructions and information.</li> <li>• If you encounter problems during the implementation of the project, you are the point of contact and you ensure that they are resolved.</li> <li>• You work together with a driven team and the application engineer.</li> </ul>		AM Process Engineer		1.13

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.reed.co.uk/jobs/design-engineer/38730872?source=searchResults#/jobs/3d-printing-jobs">https://www.reed.co.uk/jobs/design-engineer/38730872?source=searchResults#/jobs/3d-printing-jobs</a>  <a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm</a>  <a href="https://www.cv-library.co.uk/job/210649629/Design-Engineer?s=100839&amp;rx_campaign=adzuna5&amp;rx">https://www.cv-library.co.uk/job/210649629/Design-Engineer?s=100839&amp;rx_campaign=adzuna5&amp;rx</a>	Luton Bennett	Aylesbury, UK.	(Mechanical) Design Engineer	<ul style="list-style-type: none"> <li>• primarily using VISI (similar to SolidWorks/Inventor, although full training will be given) to produce concept designs and recodification of existing products.</li> <li>• to liaise and support the production department, customers and sales team, providing them with information and regular updates; there is also an element of upselling the product range.</li> <li>• You will work in a small design team alongside another Design Engineer, Project Engineer, reporting into the company Works Manager/Director.</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>• Mechanical Design Engineer.</li> <li>• Experience working with machine tools, fixture design and precision engineering.</li> <li>• Experience using any 3D CAD package.</li> <li>• Ideally have some knowledge of electrical/electronic engineering.</li> </ul>	1.14

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.linkedin.com/company/3257&amp;rx_job=210649629&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16">_group=103257&amp;rx_job=210649629&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16</a>								

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.cv-library.co.uk/job/210550013/Mechanical-Design-Engineer?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=103640&amp;rx_job=210550013&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16">https://www.cv-library.co.uk/job/210550013/Mechanical-Design-Engineer?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=103640&amp;rx_job=210550013&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16</a>	STEM Source Ltd (Agency)	Hampshire, UK.	Mechanical Design Engineer	<ul style="list-style-type: none"> <li>• improve upon existing products and design innovative new products.</li> <li>• designing low-volume products for hazardous areas.</li> </ul>			<ul style="list-style-type: none"> <li>▪ SolidWorks (3D CAD Modelling).</li> <li>▪ Experience and understanding of electro-mechanical products.</li> <li>▪ Product certification experience (ATEX, FM, UL, IECEx).</li> <li>▪ 3D printing</li> </ul>	1.15

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11_IP3.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11_IP3.htm</a>								
			<a href="https://www.cv-library.co.uk/job/210592355/Mechanical-Design-Engineer?s=100551&amp;rx_campaign=adzuna5&amp;rx_group=103276&amp;rx_job=210592355&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_">https://www.cv-library.co.uk/job/210592355/Mechanical-Design-Engineer?s=100551&amp;rx_campaign=adzuna5&amp;rx_group=103276&amp;rx_job=210592355&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_</a>	Samcra Resourcing (Agency)	Leeds, UK.	Mechanical Design Engineer	<ul style="list-style-type: none"> <li>Involve designing parts for 3D printing, sheet metal, extrusion and injection moulding.</li> </ul>			<ul style="list-style-type: none"> <li>SolidWorks (3D CAD Modelling).</li> <li>experience of any other mechanical or optical design packages.</li> </ul>	1.16

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			source=adzuna&utm_content=adz_2011-3&rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16								
			<a href="https://www.glassdoor.co.uk/job-listing/graduate-mechanical-engineer-mechanical-designer-diamond-light-source-JV_IC3380446_KO0,48_KE49,69.htm?jl=3313963634&amp;ctt=1567430813217">https://www.glassdoor.co.uk/job-listing/graduate-mechanical-engineer-mechanical-designer-diamond-light-source-JV_IC3380446_KO0,48_KE49,69.htm?jl=3313963634&amp;ctt=1567430813217</a>	Diamond Light Source Ltd	Didcot, UK.	Mechanical Engineer/ Designer	<ul style="list-style-type: none"> <li>• Design of precision mechanisms.</li> <li>• Design Ultra High Vacuum vessels.</li> <li>• Design of Systems operating at Cryogenic temperatures.</li> <li>• Design for and Use of Additive manufacturing;</li> <li>• Design of high stiffness low vibration structures</li> <li>• Use of novel materials.</li> </ul>		Materials Engineer	<ul style="list-style-type: none"> <li>• Experience in designing complex mechanisms and structures ranging from small devices with nanometre resolution to much larger fabricated structures.</li> <li>• 3D and 2D CAD particularly CREO and AUTOCAD.</li> </ul>	1.17

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.adzuna.co.uk/jobs/details/1247016090?se=248XePKUTDC7YDRs1ye6IQ&amp;v=24667E25214203D1C5382F1CF84FCB779492373">https://www.adzuna.co.uk/jobs/details/1247016090?se=248XePKUTDC7YDRs1ye6IQ&amp;v=24667E25214203D1C5382F1CF84FCB779492373</a>	Recruit4staff Ltd  (Automation)	Unspecified, UK.	Mechanical Design Engineer	<ul style="list-style-type: none"> <li>• Mechanical design of components used in automated production lines.</li> <li>• 3D CAD design of complex systems and assemblies.</li> <li>• Preparing 2D CAD drawings</li> <li>• Design of 3D printed components.</li> <li>• <b>Building and testing of automated equipment.</b></li> </ul>		NDT Technician	<ul style="list-style-type: none"> <li>• BEng degree or higher in Mechanical Engineering.</li> <li>• Genuine interest in mechanical assembly design.</li> <li>• 3D CAD skills.</li> </ul>	1.18
			<a href="https://www.therecban.com/job/mechanical-design-engineer-1895877.htm?utm_source=adzuna&amp;utm_medium=adzuna">https://www.therecban.com/job/mechanical-design-engineer-1895877.htm?utm_source=adzuna&amp;utm_medium=adzuna</a>	Omega Resource Group (Agency)  Aerospace	Tewkesbury, UK.	Mechanical Design Engineer	<ul style="list-style-type: none"> <li>• Involved in interfacing with the customer to establish the appropriate problem statement, contributing to the development of new products</li> <li>• teaming with other engineering disciplines to ensure the producibility and integrity of the design straight through to supporting the manufacture and testing of the product.</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>• HNC, HND, Degree or equivalent in a relevant engineering discipline such as Mechanical Engineering.</li> <li>• Experience of conceptual and detailed design of complex systems and mechanisms.</li> <li>• Experience of working with a design package e.g. Siemens NX.</li> <li>• Understanding of manufacturing/machining processes.</li> </ul>	1.19

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>Understanding and knowledge of GD&amp;T.</li> </ul>	
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE2MzQxOTkxMy1TIDE">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE2MzQxOTkxMy1TIDE</a>	MEGIST GmbH	Stuttgart, Germany	Mechanical Engineer	<ul style="list-style-type: none"> <li>You independently coordinate the process chain from the request for quotation in coordination with purchasing to the achievement of on-time production use of the components to be managed according to the functional goals and the quality and cost specifications with the development departments.</li> <li>you work closely with internal ones throughout the entire process chain and external development sites from design to market representatives together with the aim to bring additive-manufactured components into series production.</li> </ul>		AM Process Engineer	<ul style="list-style-type: none"> <li>Mechanical engineering, plastics engineering or a comparable qualification.</li> <li>Professional experience in the field of vehicle development and project management,</li> <li>preferably in the field of plastic.</li> <li>Experience in the production approval process (material release, production processes,</li> <li>Group standards and norms)</li> </ul>	1.20
			<a href="https://jobs.3dprintingindustry.com/jobs/15691132-mechanical-engineer-at-kodama-">https://jobs.3dprintingindustry.com/jobs/15691132-mechanical-engineer-at-kodama-</a>	Kodama Technologies GmbH	Berlin, Germany.	Mechanical Engineer	<ul style="list-style-type: none"> <li>Design and develop new ideas, improve of mechanical components which includes, individual parts subassemblies and complete system as required.</li> <li>Create detailed fabrication and assembly documents.</li> </ul>	<ul style="list-style-type: none"> <li>Create detailed fabrication and assembly documents.</li> <li>Troubleshooting</li> </ul>	AM Coordinator	<ul style="list-style-type: none"> <li>Previous knowledge of 3D printing. Marlin firmware in particular desirable.</li> </ul>	1.21



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			technologien-gmbh				<ul style="list-style-type: none"> <li>• Troubleshooting mechanical designs, find the root cause and brainstorm solutions.</li> <li>• Generate reports and design inspection conditions.</li> <li>• Develop and adhere to project schedules, create component specifications (BOM's) and engineering drawings for projects - FUSION 360 is preferred.</li> <li>• Assist in prototyping - run models through slicers and set-up prints.</li> <li>• Practice your knowledge of materials used in the industry, providing detailed specifications to suppliers and pursue continuous cost reduction and design improvement efforts.</li> <li>• Provide primary documentation support in developing Design Specifications, product Operation Manuals and Manufacturing work instructions.</li> <li>• Work with other team members to complete projects and offer technical consultation.</li> </ul>	<ul style="list-style-type: none"> <li>mechanical designs, find the root cause and brainstorm solutions.</li> <li>• Generate reports and design inspection conditions.</li> <li>• The production of prototype.</li> </ul>		<ul style="list-style-type: none"> <li>• Proficiency in documenting, presenting, technical drawing, and Fusion 360.</li> <li>• Ability to design and develop components and products from concept through final product release.</li> <li>• Solve various design problems independently with minimum guidance.</li> </ul>	
			<a href="https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;">https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;</a>	Kolibri Metals GmbH	Amtzell, Germany.	AM Mechanical Engineer	<ul style="list-style-type: none"> <li>• Design and construction of new products.</li> <li>• Parameter development and optimization on our SLM systems.</li> <li>• Development of new patents and development of novel technical</li> </ul>		Materials Engineer	<ul style="list-style-type: none"> <li>• Bachelor / Master Mechanical Engineering</li> <li>• First experience in handling SLM machines</li> </ul>	1.22

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3MjY2ODIxMi1TIDE	Maximilian Bronner jobc@kolibri.de.com			<ul style="list-style-type: none"> <li>solutions for the further development of SLM technology.</li> <li>Further development of materials in collaboration with our laboratory.</li> </ul>			<ul style="list-style-type: none"> <li>Experience in additive design.</li> </ul>	
			https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&app=4.1.1p5-build-1#/jv-details/MT1yNjUtMTg4OTI1X0pCNzc2NjA1LV MgMQ?jvDisplayLanguage=de	FERCHAU Engineering GmbH Branch: Bremen	Germany	Development Engineer Additive Manufacturing	<ul style="list-style-type: none"> <li>Conception and development of solutions for optimized device and system development.</li> <li>Collaboration with the customer and our sales and technical teams.</li> <li>Implementation of feasibility, cost and risk analyses in the field of additive manufacturing.</li> <li>Drafting, including incorporation of changes, to the design of individual parts and assemblies with NX.</li> <li>Conception, preparation and control of product tests.</li> <li>Development of technical documentation and assembly instructions, including risk assessment.</li> </ul>	<ul style="list-style-type: none"> <li>Conception, preparation and control of product tests.</li> <li>Development of technical documentation and assembly instructions, including risk assessment.</li> </ul>	AM Coordinator	<ul style="list-style-type: none"> <li>University degree in an engineering degree program such as mechanical engineering, precision engineering or a comparable qualification.</li> <li>Knowledge of additive manufacturing techniques and first hands-on experience in 3D printing technology.</li> <li>Basic knowledge in the processing of fibre composites and carbon.</li> <li>Safe handling of CAD programs ideally Siemens NX.</li> </ul>	1.23

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>Communication skills and innovative ideas.</li> </ul>	
			<a href="https://i-amdigital.com/opportunities/lead-design-engineer-m-f-d-additive-manufacturing">https://i-amdigital.com/opportunities/lead-design-engineer-m-f-d-additive-manufacturing</a>	GE Additive	Germany	Lead Design Engineer (m/f/d) Additive Manufacturing	<ul style="list-style-type: none"> <li>Work with customers to identify the best path for the introduction of metal am into their organisation, e.g. training the team, part identification, re-design for am etc.</li> <li>Lead and support customer engagements, understand customer requirements and delivering additive manufacturing knowledge transfer to the customer through training, workshops &amp; execution of collaborative design, development &amp; manufacturing projects</li> <li>Product redesign or new product clean sheet design of parts assemblies and systems for metal additive manufacturing considering DMLM, EBM and/or Binder Jet modalities</li> <li>Able to work in a multi-functional, global team</li> <li>Willingness to travel up to 25%</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	AM Coordinator	Qualifications/Requirements: <ul style="list-style-type: none"> <li>Bachelors/Master's degree in an Engineering or equivalent knowledge or experience</li> <li>Experience of direct collaboration or communication with external customers, suppliers and project partners</li> <li>Familiarity with additive manufacturing technologies and design for additive</li> <li>Strong working knowledge of one or more CAD systems e.g. NX, CREO, CATIA and several years of</li> </ul>	1.24

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>experience working as Design or Senior Design Engineer</li> <li>• Familiarity with mechanical &amp; thermal simulation tools e.g. ANSYS Workbench</li> <li>• Proficient in English</li> <li>• Desired Characteristics:</li> <li>• Validated ability to lead multi-disciplinary projects</li> <li>• Proficient in German</li> <li>• Experience in AM build job preparation – part orientation &amp; support design</li> </ul>	
			<a href="https://i-amdigital.com/opportuniti">https://i-amdigital.com/opportuniti</a>	GE Additive	GERMANY	Design Engineer (m/f/d) Additive	<ul style="list-style-type: none"> <li>• Essential Responsibilities:</li> <li>• Support customer engagements, interpret customer requirements</li> </ul>	•	AM coordinator	<ul style="list-style-type: none"> <li>• Qualifications/Requirements:</li> </ul>	1.25

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="#">es/design-engineer-m-f-d-additive-manufacturing</a>			Manufacturing	<p>and delivering additive manufacturing knowledge transfer to the customer through training, workshops &amp; execution of collaborative design, development &amp; manufacturing projects</p> <ul style="list-style-type: none"> <li>• Product redesign or new product clean sheet design of parts, assemblies and systems for metal additive manufacturing considering DMLM, EBM and/or Binder Jet modalities</li> <li>• Able to work in a multi-functional, global team</li> <li>• Willingness to travel up to 25%.</li> </ul>			<ul style="list-style-type: none"> <li>• Bachelors/ Master's degree in an Engineering or equivalent knowledge or experience</li> <li>• Several years of experience in design and strong working experience of one or more CAD systems e.g. NX, CREO, CATIA</li> <li>• Good written and spoken knowledge of English and German languages</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>• Familiarity with mechanical &amp; thermal simulation tools e.g. ANSYS Workbench.</li> <li>• Desired Characteristics:</li> <li>• Additive manufacturing experience</li> <li>• Familiarity with additive manufacturing technologies and design for additive</li> <li>• Working knowledge of simulation tools, such as ANSYS</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<p>Workbench</p> <ul style="list-style-type: none"> <li>• Experience in AM build job preparation – part orientation &amp; support design</li> <li>• You are a team worker and have excellent interpersonal skills</li> </ul>	
			<a href="https://i-amdigital.com/opportunities/senior-mechanical-design-engineer-eindhoven">https://i-amdigital.com/opportunities/senior-mechanical-design-engineer-eindhoven</a>	Additive Industries,	NETHERLANDS	Senior Mechanical Design Engineer	<ul style="list-style-type: none"> <li>• Additive Industries is looking for a Senior Mechanical Design Engineer to join the development team. In our multidisciplinary team, you will play an important role in the development of our 3D metal printer.</li> <li>• You will be responsible for the development and improvement of modules of our 3D metal printer</li> </ul>			<ul style="list-style-type: none"> <li>• Knowledge and experience</li> <li>• Education:</li> <li>• Bachelor of Master in Mechanical Engineering</li> <li>• Experience /skills:</li> </ul>	1.26

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>according requirements that you derive from the overall system requirements. Depending on the scope of the module this means you will guide outsourcing of the development, guide junior engineers and/or develop the design yourself. You will develop concepts, translate these in detailed designs in 3D CAD and analyze and review your work with team members.</p> <ul style="list-style-type: none"> <li>If required, you will design proof-of-principle test setups or functional models as an intermediate step. After creation of 2D technical product documentation you will make sure your designs are suitable for series production at high quality standards. At Additive Industries engineers are not only responsible for the design, but also for</li> </ul>			<ul style="list-style-type: none"> <li>Able to work both at conceptual and detailed design levels</li> <li>10 years of experience in mechanical design of complex mechatronic modules and/or systems</li> <li>3D CAD modeling (preferably UG/NX)</li> <li>Extensive expertise of design principles</li> <li>Knowledge of production techniques / manufactu</li> </ul>	



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>extensive testing of the developed hardware to verify the performance and make any required improvement. You will test and document your designs, before release to production.</p> <ul style="list-style-type: none"> <li>The main activities for a successful performance are:</li> <li>Specification and creation of module design concepts</li> <li>Distribution of required activities over internal / external resources</li> <li>Analysis, calculation, simulation (back-of-the-envelope to FEA) of your design</li> <li>Detailing mechanical concepts of (sub)modules to technical product documentation</li> <li>Functional testing of modules to verify the design</li> </ul>			<p>rability of mechanical parts</p> <ul style="list-style-type: none"> <li>Knowledge of PDM systems (preferably Team center)</li> <li>(optional) Finite Element Analysis experience (preferably ANSYS, structural, dynamic, steady state thermal)</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>Documenting work during design, integration and testing</li> </ul>				

Table 8: AM Designer Professional Profiles.

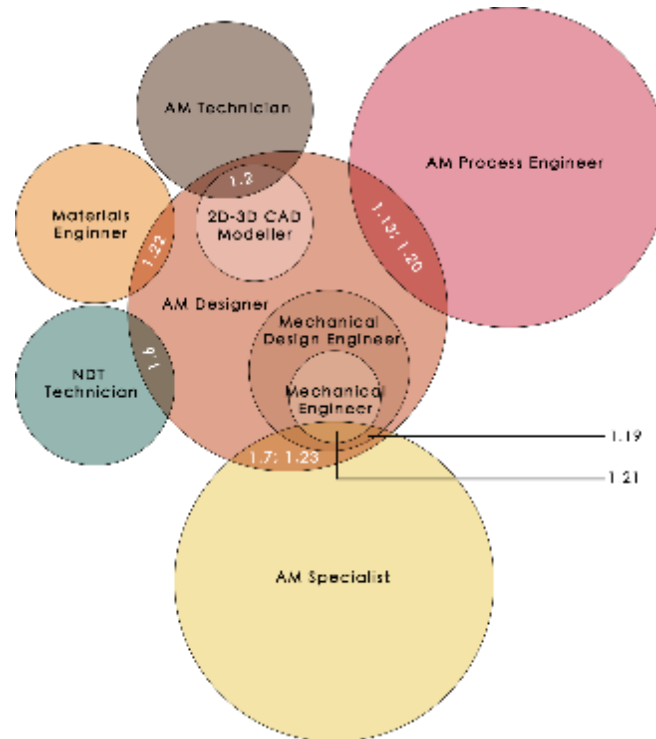


Figure 2: Types of Professional Profiles under AM designer and their overlapping roles.

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
2	<b>AM Process Engineer</b> - Professionals that are able to create the manufacturing process for the efficient production and post-processing of additively manufactured parts.	Develop and execute Specific AM Process plans including validation of design, implementation, pre and post processing operations, assurance of parts conformity and identification of the causes and the corrective actions of technical production problems; Coordinate the tasks distribution between the operators according to the work plan as well as manage the link between them and the management.	<a href="https://banen.monsterboard.nl/design-engineering-mbo-hbo-engineering-3d-printing-regio-eindhoven-eindhoven-nb-nl-trinamics/208483969">https://banen.monsterboard.nl/design-engineering-mbo-hbo-engineering-3d-printing-regio-eindhoven-eindhoven-nb-nl-trinamics/208483969</a>	Trinamics  (Agency)	Eindhoven, Netherlands	Design Engineering	<ul style="list-style-type: none"> <li>Assigned to support the design, integration, implementation of various (sub)systems.</li> <li>Mainly interfacing between internal customer (Project lead/designers) and model shop and supply chain capabilities on additive manufacturing also 3D print facilities (maintenance, planning, operate, stock control, outsourcing models) will be part of your job description.</li> </ul>			<ul style="list-style-type: none"> <li>0-2 years' experience with 3D printing.</li> <li>CAD skills (NX/Siemens software knowledge)</li> <li>Project management skills</li> <li>Practical skills (milling/turning)</li> </ul>	2.1
			<a href="https://ec.europa.eu/eures/searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MjgSMTMgMTI">https://ec.europa.eu/eures/searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MjgSMTMgMTI</a>	GE Healthcare  Steven Abitz  Principal AME Process Engineer	Uppsala, Sweden.	AM Process Engineer	<ul style="list-style-type: none"> <li>Work with Additive COE leadership to identify and implement additive manufacturing projects and applications at Additive Development Center globally, specifically in polymer additive technologies (e.g. Stereolithography (SLA), Digital Light Processing (DLP), Continuous Light Interface Process (CLIP)).</li> </ul>			<ul style="list-style-type: none"> <li>MS/PHD in technical concentration/field or equivalent knowledge or experience.</li> <li>Major industrial experience in Manufacturing Engineering.</li> </ul>	2.2

		x?jvDisplayL anguage=sv	steven.abit z@ge.com.		<ul style="list-style-type: none"> <li>• Support engineering teams across all GEHC modalities to design for Additive when applicable and develop processes to transfer Additive Manufacturing processes from design to supply chain.</li> <li>• Provide technical support to GEHC additive manufacturing development centres to take design concepts and turn them into optimized and robust processes for large scale manufacturing.</li> <li>• Support AME Additive Manufacturing COE activities and sub-core teams; foster synergies and collaborate with other. Advanced Manufacturing Process Technology COEs and Technical Councils to standard utilization of Additive technologies within GEHC.</li> <li>• Leverage and expand network of experts across GEHC and other GE businesses to drive best practice sharing, knowledge transfer, training and awareness of Additive capabilities.</li> <li>• Drive improved product quality by identifying manufacturing issues, developing advanced manufacturing cost-effective solutions, and overseeing successful implementation of Additive Manufacturing into production.</li> </ul>		<ul style="list-style-type: none"> <li>• 6-sigma DMAIC &amp; DFSS certified.</li> <li>• Domain expertise in the field of additive manufacturing and polymer material technologies.</li> <li>• Domain expertise in the Stereolithography (SLA), Digital Light Projection (DLP), Continuous Light Interface Process (CLIP) or other Vat-Photopolymerization technologies for Nano-Scale applications.</li> <li>• Domain expertise in process intensive manufacturing (e.g. machining, joining &amp; forming, injection moulding, etc.).</li> <li>• Strong working knowledge of CAD systems and CAD file management (e.g. Creo, SolidWorks).</li> <li>• Product and process development experience,</li> </ul>	
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						<ul style="list-style-type: none"> <li>• Monitor and improve productivity through the use of Lean Six Sigma or related tools, while ensuring all customer commitments are timely and cost-conscious and met with quality</li> <li>• Ensure regulatory compliance through Qualification &amp; Validation. Responsible for ensuring rigor in determining processes requiring validation, development of plans and analysis criteria, execution and final analysis and acceptance.</li> <li>• Drive continuous simplification of QMS methods and their applications by working with cross-functional team including Operations and Quality Assurance. Work with the facilities and maintenance teams to implement change and ensure the required product capacity is in place before it is required by customer demand.</li> </ul>		<ul style="list-style-type: none"> <li>• Solid working knowledge of GEHC QMS procedures for GMP.</li> <li>• Experience developing tools and templates.</li> <li>• Demonstrated program or project management skills.</li> <li>• Demonstrated experience owning production processes / growing capability in yield and quality.</li> <li>• Experience working with global teams.</li> </ul>	
		<a href="https://www.linkedin.com/jobs/view/1446978770/">https://www.linkedin.com/jobs/view/1446978770/</a>	GE Additive  Industry: Airlines/ Aviation and Aerospace	Munchen, Germany	Additive Manufacturing Engineer	<ul style="list-style-type: none"> <li>• Lead the coordination, planning, execution and documentation of additive build jobs to ensure parts are within specifications and delivered on-time.</li> <li>• Drive the execution of new manufacturing processes and tools.</li> <li>• Spearhead the adoption and implementation of the latest machine settings and parameters to ensure repeatable and reliable prints.</li> </ul>		<ul style="list-style-type: none"> <li>• Bachelor/ master's degree in relevant engineering discipline or equivalent knowledge or experience.</li> <li>• Some experience in metal additive manufacturing.</li> <li>• Good working knowledge in CAD systems e.g. NX, CATIA, CREO.</li> </ul>	2. 3

						<ul style="list-style-type: none"> <li>Evaluate the feasibility of builds and support business case calculations of additive parts.</li> <li>Support build job preparation and build time estimation – part orientation &amp; support design.</li> </ul>		<ul style="list-style-type: none"> <li>Strong knowledge of design practices and part requirements.</li> </ul>	
		<p><a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MDkxVkdIUCA5?jvDisplayLanguage=fr">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MDkxVkdIUCA5?jvDisplayLanguage=fr</a></p> <p><a href="https://candidat.pole-emploi.fr/offres/recherche/detail/091VGHP">https://candidat.pole-emploi.fr/offres/recherche/detail/091VGHP</a></p>	Not specified	Bayonne, France	Additive Manufacturing Engineer	<ul style="list-style-type: none"> <li>Conduct experimental plans in partnership with laboratories to master and model processes.</li> <li>Intervene on the development of new specific client applications (medical, aeronautic, energy, etc.).</li> <li>Develop parameters / manufacturing profiles specific to a machine / material configuration.</li> <li>Provide technical support and training to clients.</li> <li>To carry out studies and bibliographies on the processes of F.A.</li> <li>You will work in collaboration with an FA technician, in our laboratory, under the responsibility of the additive manufacturing expert. You will be surrounded by a multidisciplinary team and you will have a lot of leeway on your projects.</li> </ul>	<ul style="list-style-type: none"> <li>Intervene on the development of new specific client applications.</li> <li>Provide technical support and training to clients.</li> </ul>		2.4

		<p><a href="https://www.glassdoor.co.uk/job-listing/advanced-manufacturing-engineer-collins-aerospace-JV_IC3380300_KO0,31_KE32,49.htm?jl=3152851066&amp;ctt=1567424137990">https://www.glassdoor.co.uk/job-listing/advanced-manufacturing-engineer-collins-aerospace-JV_IC3380300_KO0,31_KE32,49.htm?jl=3152851066&amp;ctt=1567424137990</a></p>	Collins Aerospace	Banbury, UK.	Advanced Manufacturing Engineer	<ul style="list-style-type: none"> <li>• Support new product introduction activities, working closely with Design Engineering, ensuring that new capabilities/methods are at the required level of readiness for production.</li> <li>• Assess and develop new and innovative technologies that provide demonstrable benefits to the business to the point they can be introduced to production.</li> <li>• Ensure methods and processes are capable of meeting requirements for safety, quality, delivery rate, cost and lead time.</li> <li>• Lead FAT and SAT testing on all new pieces of production equipment</li> <li>• Develop, improve and provide innovation to current manufacturing process, including the trial and implementation of new technologies.</li> <li>• Conduct Production Validation Tests and author reports for any new products/processes.</li> <li>• Lead/ support quality issue investigations, quickly providing robust containment actions and conducting root cause analysis to implement permanent corrective actions.</li> <li>• Implement process automation where deemed appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Support new product introduction activities.</li> <li>• Assess and develop new and innovative technologies that provide demonstrable benefits to the business to the point they can be introduced to production.</li> <li>• Develop, improve and provide innovation to current manufacturing process, including the trial and implementation of new technologies.</li> </ul>	AM Inspector	<ul style="list-style-type: none"> <li>• Relevant Manufacturing Engineering experience.</li> <li>• Experience of leading projects and working with cross functional teams.</li> <li>• Experience of planning and co-ordinating work activities.</li> <li>• An understanding of manufacturing systems, production flow lines and the introduction of new technologies.</li> <li>• Technically competency with the ability to read and understand engineering drawings, reports and metrology results.</li> <li>• An awareness of current EH&amp;S legislation.</li> <li>• Experience of specifying, designing and procuring production tooling and equipment.</li> <li>• Experience of authoring clear and</li> </ul>	2.5
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										<p>concise standard operating procedures.</p> <ul style="list-style-type: none"> <li>• A good understanding of production quality issues and the impact that processes/equipment can have on these.</li> <li>• A data driven mind set with excellent problem-solving skills.</li> <li>• Knowledge of Lean principles and quality problem solving tools.</li> <li>• Experience of creating PFMEA's and implementing appropriate improvement actions.</li> <li>• Experience of implementing and using Statistical Process Control (SPC)</li> <li>• Competency using Microsoft Office (Outlook, PowerPoint, Word and Excel).</li> <li>• Excellent communication</li> </ul>
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									skills at all business level.	
		<a href="https://www.reed.co.uk/jobs/senior-engineering-project-manager/38579917?source=searchResults#jobs/3d-printing-jobs">https://www.reed.co.uk/jobs/senior-engineering-project-manager/38579917?source=searchResults#jobs/3d-printing-jobs</a>	Photocentric Ltd  (our dedicated team of 12 Mechanical Design Engineers, Technicians and Process Engineers.)	Peterborough, UK.	Senior Engineering Project Manager  (a decision maker in the overall strategy of our rapidly growing business)	<ul style="list-style-type: none"> <li>• Project manage from conception to production the range of unique 3D printers, ensuring they are capable of being brought to market as efficiently as possible.</li> <li>• Promote an environment where teamwork, open communication and continuous improvement are encouraged.</li> <li>• Coordinate, monitor and control individual projects to ensure delivery of objectives</li> <li>• Setting KPI's to deliver quality, customer service and efficiency.</li> <li>• Working with the engineers to implement the company's strategy, policies and goals ensuring each engineer have planned work and set goals meeting deadlines each step of the way.</li> </ul>		<ul style="list-style-type: none"> <li>• Ability to operate effectively within a matrix organisation structure.</li> </ul>	<ul style="list-style-type: none"> <li>• highly proficient in project management techniques and their application, with the ability to prioritise work to meet deadlines for yourself and others.</li> <li>• Proven experience in a similar project management role Ideally engineering/design engineering background.</li> <li>• Project Management Qualification (APM PPQ, Chartership or equivalent) and knowledge of Prince2.</li> <li>• Strong people management skills to manage cross functional, multi-disciplinary teams and to influence people outside the</li> </ul>	2.6

									<p>direct line management chain.</p> <ul style="list-style-type: none"> <li>• Genuine interest in 3D Printing.</li> <li>• Ideally have experience of working in an innovative company bringing a new product to market.</li> <li>• Excellent communication skills and the ability to present complex information effectively to meet the needs of different audiences.</li> <li>• Proactive and determined with a strong focus on delivering and meeting tight deadlines.</li> <li>• Engineering / Mechanical Design Engineer (or equivalent) degree level qualification.</li> </ul>	
		<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-</a>	ÖBB Group	Vienna, Austria.	Product and Process Manager Additive manufacturing	<ul style="list-style-type: none"> <li>• Carry out the evaluation, adaptation and preparation of components and use cases for 3D printing, as well as qualified internal advice, e.g. for engineering, production and sales staff together with the competent authorities.</li> </ul>	<ul style="list-style-type: none"> <li>• You develop the quality assurance processes of the manufactured parts with suitable</li> </ul>	AM Inspector	<ul style="list-style-type: none"> <li>• You have a degree in Industrial Engineering, Supply Chain Management or a similar field of study.</li> <li>• You have at least 3 years' experience in</li> </ul>	2.7

		1#/jv-details/MTIwMDU3MjcgNDM?jvDisplayLanguage=de				<ul style="list-style-type: none"> <li>You develop the quality assurance processes of the manufactured parts with suitable measuring equipment in cooperation with internal competence carriers and suppliers.</li> <li>Participate in funded research and development projects with external institutes and partners and collaborate with technology centres in the field of additive manufacturing and industrial production.</li> <li>You coordinate activities for the introduction of 3D printing in the ÖBB Group, together with the head of Additive Manufacturing.</li> <li>You participate in the development and dissemination of technical solutions that are tailored to the needs of the customer.</li> <li>You collect and present reference projects and are responsible for the success of your products.</li> </ul>	measuring equipment in cooperation with internal competence carriers and suppliers.	the field of additive manufacturing technologies, industrial engineering, production, industry 4.0, production IT and project management.	
		<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/ZTImYjU3NzktNjkkNS000">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/ZTImYjU3NzktNjkkNS000</a>	USG Professionals	Belgium	Junior Manufacturing Engineer	<p>This role assists the manufacturing engineers in the timely execution and follow-up of activities that drive the manufacturing of products forward.</p> <ul style="list-style-type: none"> <li>Actively takes ownership for operational and project related activities in manufacturing engineering and related manufacturing operations.</li> </ul>			2.8

			<p>TUyLTiInjct Y2JINGE5Y WE1OTixiD M?vDispla yLanguage= nl</p>			<ul style="list-style-type: none"> <li>• Ensures completion of projects and activities i.e. delivers on schedule with required quality.</li> <li>• Collaborates with subject matter experts for timely completion of deliverables.</li> <li>• Cooperates with cross-functional teams from other departments, most notably procurement, logistics and R&amp;D.</li> <li>• Works with suppliers for timely completion of design and assembly of subsystems.</li> <li>• Requires a broad technical background in order to understand and actively contribute to complete technical documentation deliverables.</li> <li>• Achieves goals by active individual contributions.</li> </ul>				
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Table 9: AM Process Engineer Professional Profiles.

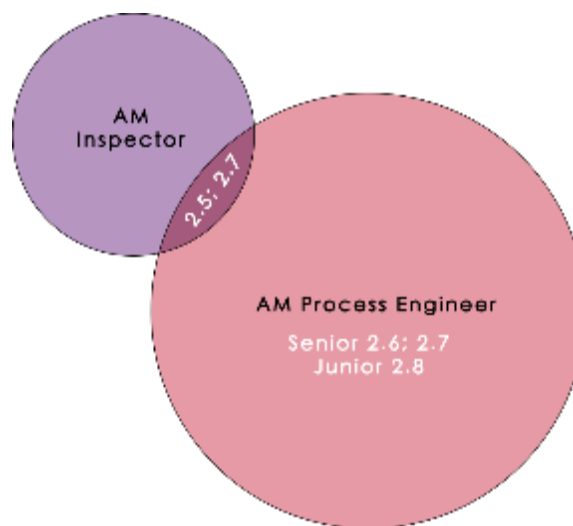


Figure 3: Types of Professional Profiles under AM Process Engineer and their overlapping roles.

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
3	<b>AM Inspector</b> - Professionals that are able to define and carry out inspection of additively manufactured parts	Carry out quality assessments and inspection of AM parts. Interpret DT (Destructive Testing) and NDT (Non-destructive Testing) reports.	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-</a>	Pankl Racing System AG	Austria	Additive Manufacturing (AM) - Employee Quality Assurance	<ul style="list-style-type: none"> <li>Performing visual inspections of additively manufactured components.</li> <li>Creation of 3D scans of additively manufactured components.</li> <li>Creation of measurement protocols and quality documents.</li> </ul>		AM Operator/ Technician	<ul style="list-style-type: none"> <li>Operation of CNC measuring machines.</li> <li>Technical training in a metal job, college or HTL.</li> </ul>	3.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			1#/jv-details/MTA5MTUxMzUgNDM?jvDisplayLanguage=de				<ul style="list-style-type: none"> <li>Dealing with various hand-held measuring devices, as well as surface roughness and contour checking devices.</li> </ul>			<ul style="list-style-type: none"> <li>Experience with 3D scanners, e.g. ATOS GOM advantageous.</li> <li>MS Office basic knowledge</li> </ul>	
4	<b>Inspection Technician</b>	Carry out the dimensional inspection of complex geometries of additively manufactured parts to the client's requirements.									4.1
5	<b>NDT Technician</b>	Carry out the safe and reliable non-destructive testing of complex geometry additively manufactured parts.	<a href="https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=fa524c1153239a84">https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=fa524c1153239a84</a>	Better People Ltd	Chalgrave, UK	Prototyping Mechanist Engineer	<ul style="list-style-type: none"> <li>Helping design engineers develop concepts into high performance efficiently manufacturable products through iteration and testing.</li> <li>Creating application specific test rigs to make testing efficient repeatable and standardised, this may involve some electronics and programming.</li> <li>Carry out test plans and share results with the team, informing future iterations of the design.</li> </ul>				5.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/YmFkMjFmNGEtNDM5Mi00MzAzLTg0YmMtZTU2MjE2OGJlYjZlIDM?jvDisplayLanguage=nl">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/YmFkMjFmNGEtNDM5Mi00MzAzLTg0YmMtZTU2MjE2OGJlYjZlIDM?jvDisplayLanguage=nl</a>	Flanders Make VZW	Leuven, Belgium	Design & Test Engineer for (Additive) Manufacturing Machines	<ul style="list-style-type: none"> <li>• For different production processes and mechatronic applications, you work in a team, where you focus on the design of prototype/ demonstrators and on the construction of test setups.</li> <li>• use, expand and manage the test setups, working closely together with technology experts in different domains (sensing, control, software architecture, software integration, automation, robotics, laser/optics, additive manufacturing, testing, etc).</li> <li>• Organize virtual and experimental tests;</li> <li>• Define the test plan of research projects together with the project team and take the lead to define the specification, architecture, validation aspects;</li> <li>• Create, adapt and validate virtual models before experimental tests;</li> </ul>				5.2

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>• Formulate the requirements for new equipment or software needed;</li> <li>• Instrument the hardware for experimental tests; Perform the test.</li> <li>• Analyse the test data together with the team.</li> <li>• You know your infrastructure and identify the scope and timing of the research solutions we can offer to companies;</li> <li>• Detect opportunities for new business and improvements on the test environment.</li> <li>• Adjust infrastructure for new research needs;</li> <li>• Ensure that all equipment and infrastructure functions safely and optimally at all times.</li> </ul>				
			<a href="https://www.reed.co.uk/jobs/mechanical-technician/38650053?source=searchResults#/">https://www.reed.co.uk/jobs/mechanical-technician/38650053?source=searchResults#/</a>	Vector Recruitment Ltd	Cambidge, UK.	Mechanical Technician/ Workshop Technician	<ul style="list-style-type: none"> <li>• Development and build of test rigs.</li> <li>• Conduct design verification and testing.</li> </ul>	<ul style="list-style-type: none"> <li>• Development and build of test rigs.</li> </ul>		<ul style="list-style-type: none"> <li>• HNC / HND qualified or apprentice trained in a relevant engineering discipline, with appropriate industry experience.</li> </ul>	5.3



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			jobs/3d-printing-jobs							<ul style="list-style-type: none"> <li>• Understand technical drawings.</li> <li>• Experience in operation of manual lathes and mills machines.</li> <li>• CAD design experience (preferably SolidWorks and/or ProE) beneficial.</li> <li>• Experience of working in a multi-skilled environment (i.e. developing electro-mechanical products).</li> <li>• Experience of experiment design and implementation for design verification beneficial</li> <li>• Model making.</li> </ul>	
6	AM Supervisor	Supervise AM production on shop floor ensuring quality and HSE procedures.	<a href="https://www.linkedin.com/jobs/view/1147879618/">https://www.linkedin.com/jobs/view/1147879618/</a>	Haus Careers (Recruiter)	London, UK.	Model maker Technician	<ul style="list-style-type: none"> <li>• Assist the Model Shop Manager in the smooth running of model shops.</li> <li>• Assisting in the development and use of 3D print technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Assisting in the development and use of 3D print technology.</li> </ul>		<ul style="list-style-type: none"> <li>• Degree in model making.</li> <li>• Experience of 3D Printing systems and relevant software.</li> </ul>	6.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>• Training and tutoring staff on equipment usage and best practice techniques.</li> <li>• Ensuring both model shops are maintained to a high standard as well as some direct model making and construction from time to time.</li> </ul>	<ul style="list-style-type: none"> <li>• Training and tutoring staff on equipment usage and best practice techniques.</li> </ul>		<ul style="list-style-type: none"> <li>• Experience delivering training.</li> </ul>	

Table 10: AM Inspector, Inspection Technician, NDT Technician, AM Supervisor Professional Profiles.

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
7	AM Coordinator- at the Engineer level	Evaluate manufacturing suitability for customers' requests defining which processes are fit for the request, based on the application, material, design and cost of the part.	<a href="https://www.indeed.co.uk/3d-Printing-jobs?vjk=63203a2c31949a7d">https://www.indeed.co.uk/3d-Printing-jobs?vjk=63203a2c31949a7d</a>	E3D-Online Ltd	Oxford, UK.	3D Printing Applications Engineer	<ul style="list-style-type: none"> <li>• Develop custom 3D printing extrusion systems.</li> <li>• Working closely with our commercial team to assess technical requirements of new customers.</li> <li>• Working with clients to spec out, customise, prototype and test bespoke extrusion system that meet our customer's needs.</li> </ul>				7.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_K00,11.htm</a>  <a href="https://www.indeed.co.uk/job/3d-printing-applications-engineer-63203a2c31949a7d">https://www.indeed.co.uk/job/3d-printing-applications-engineer-63203a2c31949a7d</a>	E3D-Online-Ltd	London, UK.	3D Printing applications engineer	<ul style="list-style-type: none"> <li>Working closely with our customers, who have specific engineering requirements, in order to develop custom 3D printing extrusion systems based on our proven technology and processes.</li> <li>Working closely with our commercial team to assess technical requirements of new customers.</li> <li>Working with clients to spec out, customise, prototype and test bespoke extrusion system that meet our customers' needs.</li> </ul>			<ul style="list-style-type: none"> <li>Ability to balance commercial and technical needs when developing solutions.</li> </ul>	7.2
			<a href="https://job-openings.monster.co.uk/3d-printing-customer-project-fulfilment-specialist-oxford-hc-uk-e3d-online-ltd/211323624?JDNo">https://job-openings.monster.co.uk/3d-printing-customer-project-fulfilment-specialist-oxford-hc-uk-e3d-online-ltd/211323624?JDNo</a>	E3D-online Ltd	Oxford, UK,	3D Printing Customer Project Fulfilment Specialist	<ul style="list-style-type: none"> <li>Working closely with our commercial team to assess technical requirements of new customers.</li> <li>Working with clients to spec out, customise, prototype and test bespoke extrusion system that meet our customer's needs.</li> </ul>			<ul style="list-style-type: none"> <li>At least 2 years of experience in the 3D printing industry, hands on experience using 3D printers is particularly desirable.</li> <li>Client facing experience within the 3D printing industry.</li> </ul>	7.3

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="#">bDocument .JobID=157139451&amp;AdID=34732761&amp;ImpressionGuid=e29c8261-d7da-4edf-9349-dc8a3b9bf1ea&amp;AffiliateGuid=60cfe476-dc19-4bd5-80ea-fc2a9a298470&amp;CampaignID=466233&amp;Premium=&amp;RenderedID=699&amp;code=&amp;unit=&amp;stracking=&amp;WT.mc_n=pp_sk_pja_feed_adzuna_uk</a>							<ul style="list-style-type: none"> <li>• Fantastic technical communication skills built on:</li> <li>• Exceptional technical English, both written and verbal.</li> <li>• Enthusiasm to learn about the underlying principles of our technology.</li> <li>• Extract and summarise customer requirements from emails and conversations.</li> <li>• Proficiency in multiple 3D CAD systems in order to handle client CAD.</li> <li>• Practical experience of using workshop equipment (laser cutters, etc..)</li> <li>• Ability to plan projects in parallel</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.indeed.co.uk/3d-Printing-jobs?vjk=e24dea6299d6a3ac&amp;adv">https://www.indeed.co.uk/3d-Printing-jobs?vjk=e24dea6299d6a3ac&amp;adv</a>	GoPrint3D	Ripon, UK.	Technical specialist	<ul style="list-style-type: none"> <li>• Combination of on-site and in-house work.</li> <li>• Regular travel in the UK, occasionally in Europe and less frequently, World-Wide.</li> <li>• Running user and technical training courses in-house/at customer site.</li> </ul>	<ul style="list-style-type: none"> <li>• Running user and technical training courses in-house/at customer site.</li> </ul>	AM Operator/ Technician	<p>and prioritise effectively, experience in a project management role is highly desirable.</p> <ul style="list-style-type: none"> <li>• Ability to balance commercial and technical needs when developing solutions.</li> <li>• Comfortable presenting proposals to clients and representing the company positively.</li> <li>• Highly level of organisation and attentiveness to customers' needs.</li> </ul>	7.4

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<p>n=7972217746879480</p> <p><a href="https://www.glassdoor.co.uk/job-listing/technical-specialist-goprint3d-JV_IC2693310_KO0,20_KE21,30.htm?jl=3305918656&amp;ctt=1567431141283">https://www.glassdoor.co.uk/job-listing/technical-specialist-goprint3d-JV_IC2693310_KO0,20_KE21,30.htm?jl=3305918656&amp;ctt=1567431141283</a></p>				<ul style="list-style-type: none"> <li>• Being part of our team at Trade Shows and Exhibitions.</li> <li>• Workshop-based repairs.</li> <li>• Representing us/our brands/our customers at events.</li> <li>• Printing parts in-house for pre-sales benchmarking and for paid "bureau" jobs.</li> <li>• Providing engineering support to customers via phone and ticketing system.</li> <li>• Providing support internally to colleagues.</li> </ul>	<ul style="list-style-type: none"> <li>• Providing support internally to colleagues.</li> </ul>			
			<p><a href="https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=461171ca6452c569">https://www.indeed.co.uk/jobs?q=3d%20Printing&amp;start=10&amp;advn=124782330654694&amp;vjk=461171ca6452c569</a></p>	Better People Ltd	Chalgrove, UK	Applications Engineer	<ul style="list-style-type: none"> <li>• Work with customers and clients, assessing and implementing their engineering requirements, customising, creating prototypes and bespoke extrusion systems to meet customers' needs.</li> </ul>			<ul style="list-style-type: none"> <li>• proficiency in 3D CAD</li> <li>• Balance design principles with commercial requirements</li> </ul>	7.5

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.totaljobs.com/job/applications-engineer/better-people-ltd-job87770878?WT.mc_id=A_RE_AD_ZPPC_MP1_C11_22_TJ_adz_2011-3&amp;utm_source=adzuna&amp;utm_medium=adzuna">https://www.totaljobs.com/job/applications-engineer/better-people-ltd-job87770878?WT.mc_id=A_RE_AD_ZPPC_MP1_C11_22_TJ_adz_2011-3&amp;utm_source=adzuna&amp;utm_medium=adzuna</a>								
			<a href="https://www.linkedin.com/jobs/view/1379550614/">https://www.linkedin.com/jobs/view/1379550614/</a>	Geomiq (AM Startup)	London, UK.	Manufacturing Engineer	<ul style="list-style-type: none"> <li>Analyse both prototype and production CAD models, drawings, parts lists, and other data to determine scope of work and manufacturing requirements.</li> <li>Help manage and grow the Manufacturing Project Management function at Manufacturing Source.</li> <li>Work with Clients and manufacturing partners to develop</li> </ul>	<ul style="list-style-type: none"> <li>Help manage and grow the Manufacturing Project Management function at Manufacturing Source.</li> <li>Record demand and make recommendations for</li> </ul>	AM Designer  AM Process Engineer	<ul style="list-style-type: none"> <li>Minimum 3 Years of relevant 3D CAD package.</li> <li>Deep knowledge of multiple manufacturing technologies (CNC, Sheet Metal, Injection Moulding).</li> <li>Experience of design and production of end use products.</li> </ul>	7.6

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				com/in/sam-al-mukhtar-41365968/			<p>work instruction, quotes and scheduling.</p> <ul style="list-style-type: none"> <li>Expand and develop our international network of manufacturing partners to ensure on-time in-full delivery, including site visits, phone and email communication.</li> <li>Ensure hardware and materials are ready for order completion according to the production schedule.</li> <li>Record demand and make recommendations for new platform product development.</li> </ul>	new platform product development.		<ul style="list-style-type: none"> <li>Understanding of manufacturing methods and processes across CNC Machining, Injection Moulding &amp; Sheet Metal at a minimum</li> <li>Design for Manufacture experience (Drafting, thin walls, undercuts, minimum radius etc).</li> <li>Capable of developing manufacturing processes and recommending areas for efficiency optimisation, both in the UK and Overseas.</li> <li>Managing and overseeing several million pounds in annual spend of production parts.</li> </ul>	



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.linkedin.com/jobs/view/1339972717/">https://www.linkedin.com/jobs/view/1339972717/</a>	My Mini Factory (3D Printing Start Up)	London, UK	Mechanical/ Mechatronics/ Electronics Engineer	<ul style="list-style-type: none"> <li>You will be working closely with the management and with the R&amp;D department of the 3D printer's manufacturer.</li> <li>You will be producing testing report according to our protocol.</li> </ul>		AM Inspector	<ul style="list-style-type: none"> <li>Mechanical Engineering, Electronics, Mechatronics.</li> </ul>	7.7
			<a href="https://jobs.3dprintingindustry.com/jobs/16439943-3d-printing-metals-application-engineer-f-m-d-at-hp-deutschland-gmbh">https://jobs.3dprintingindustry.com/jobs/16439943-3d-printing-metals-application-engineer-f-m-d-at-hp-deutschland-gmbh</a> (3D Printing Metals Application Engineer)	HP Deutschland GmbH	Böblingen, Germany.	3D Printing Metals Application Engineer  3D Printing Plastics - Production Development Engineer	<ul style="list-style-type: none"> <li>Lead efforts for customer application development for selected verticals.</li> <li>Ensure on-time delivery of customer applications and manage customer satisfaction.</li> <li>Build great collaborative relationships between our HP Metals 3D printing and our customers, to enable the design and engineering of extraordinary experiences and applications.</li> <li>Partner cross-functionally with Engineering, Sales, Marketing, Finance and other product teams to understand their objectives &amp; opportunities for alignment.</li> <li>Establish release and application launch schedules with engineering and operations.</li> </ul>			<ul style="list-style-type: none"> <li>Engineering background (Mechanical Engineering, Metallurgy engineering, Material science)</li> <li>You'll have proven experience in DFX (design for) techniques and tools: design for manufacturability, design for cost, design for quality, design for value. Topology optimization and simulation is a plus.</li> <li>Knowledge of CAD, CAE, CAM, cloud, analytics, IoT,</li> </ul>	7.8

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			plastics-production-development-engineer-f-m-d-at-hp-deutschland-gmbh (3D Printing Plastics - Production Development Engineer)				<ul style="list-style-type: none"> <li>• Manage Application life-cycle from initial analysis through re-design through productization.</li> <li>• Work with Sales, R&amp;D to engineer the best technology &amp; experience for Metal 3D printing customers.</li> <li>• Support business development efforts as needed.</li> </ul>			<ul style="list-style-type: none"> <li>• manufacturing systems, digital thread, digital enterprise systems (ERP, PLM, CRM) and/or professional services.</li> <li>• Demonstrated expertise in some of the following areas: Materials, 3DP, mechanical part design, new product development, manufacturing, supply chain, process characterization, quality.</li> <li>• Understanding of the relationships and implications between digitization and manufacturing, operations, key performance metrics, supply chain and logistics.</li> <li>• Professional services, strategic</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										consulting and/or solution selling experience is highly valued, as well as a depth of knowledge of industry verticals (e.g. automotive, aerospace, healthcare).	
			<a href="https://jobs.3dprintingindustry.com/jobs/16415086-3d-printing-application-engineer-f-m-d-automotive-sector-at-hp-deutschland-gmbh">https://jobs.3dprintingindustry.com/jobs/16415086-3d-printing-application-engineer-f-m-d-automotive-sector-at-hp-deutschland-gmbh</a>	HP Deutschland GmbH	Böblingen, Germany.	3D Printing Application Engineer (f/m/d) - Automotive Sector	<ul style="list-style-type: none"> <li>You will partner with our HP sales team mainly focused on Automotive accounts to provide technical leadership in the creation and delivery of 3D technology solutions designed to meet our amazing customer needs.</li> <li>You will assess technical feasibility of application for customer, do benchmark of part of customer including (re)design to optimize performance as needed, develop TCO for the part with different alternatives if needed in terms of packing, full/half builds... and help customer identify/define the right part/application in their product/business</li> <li>You will also be promoting and proposing the best combination of products and services HP or HP's</li> </ul>			<ul style="list-style-type: none"> <li>Engineering background (Mechanical Engineering, Metallurgy engineering, Material science) with an MBA ideal.</li> <li>You'll have proven experience in DFX (design for) techniques and tools: design for manufacturability, design for cost, design for quality, design for value. Topology optimization and simulation is a plus.</li> </ul>	7.9

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>partners offer to meet customer needs. In addition, you will actively grow HP's solutions portfolio by providing information ranging from technical knowledge to methodologies based on experience gained from state-of-the-art customer projects.</p> <ul style="list-style-type: none"> <li>You will contribute to HP's profitability by being accountable for generating and fostering new business opportunities and by providing technical support for deal proposal development.</li> <li>You will also be involved in activities that help generate a strong funnel in a given country like participation in tradeshow and webinars, and DfAM events including application discovery workshops when applicable</li> </ul>			<ul style="list-style-type: none"> <li>Knowledge of CAD, CAE, CAM, cloud, analytics, IoT, manufacturing systems, digital thread, digital enterprise systems (ERP, PLM, CRM) and/or professional services</li> <li>Demonstrated expertise in some of the following areas: Materials, 3DP, mechanical part design, new product development, manufacturing, supply chain, process characterization, quality.</li> <li>Understanding of the relationships and implications between digitization and manufacturing, operations, key performance</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://jobs.3dprintingindustry.com/jobs/16439646-3d-printing-process-engineer-f-m-d-at-hp-deutschland-gmbh">https://jobs.3dprintingindustry.com/jobs/16439646-3d-printing-process-engineer-f-m-d-at-hp-deutschland-gmbh</a>	HP Deutschland GmbH	Böblingen, Germany.	3D Printing Metals Process Engineer	<ul style="list-style-type: none"> <li>• Provide technical advice to HP customers about HP Metal Jet technology processes in support of business development.</li> <li>• Liaise with customers to determine and educate them on design and process requirements.</li> <li>• Act as internal subject matter expert in end-to-end process flow through print and sinter, including process recipes, statistical process control, operating procedures, change management Partner with Customers, HP Application. Engineering, Product Management, Sales and</li> </ul>	<ul style="list-style-type: none"> <li>• Support customer-facing training, process, and applications development.</li> </ul>	AM Process Engineer	<p>metrics, supply chain and logistics.</p> <ul style="list-style-type: none"> <li>• Professional services, strategic consulting and/or solution selling experience is highly valued, as well as a depth of knowledge of industry verticals (e.g. automotive, aerospace, healthcare).</li> <li>• Degree in Mechanical Engineering, Material Science, Chemical Engineering or other engineering degree.</li> <li>• 5+ years process engineering experience in a manufacturing or development environment.</li> <li>• 5+ years of Writing Systems engineering</li> </ul>	7.10

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>Engineering organizations to drive excellence in Process Engineering within HP.</p> <ul style="list-style-type: none"> <li>• Provide feedback to Applications and R&amp;D engineering teams on process capability and potential product/process improvements for increased capability.</li> <li>• Support customer-facing training, process, and applications development.</li> </ul>			<p>experience (desired but not required).</p> <ul style="list-style-type: none"> <li>• Metals manufacturing, 3D printing or advanced manufacturing experience is a bonus.</li> <li>• Excellent communication and technical problem-solving skills.</li> <li>• Prior experience with process characterization, stabilization, statistical process control, yield improvement.</li> <li>• Experience in working with a cross-functional team across R&amp;D, sales and operations.</li> </ul>	

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3MjY4MDE3DU3OS1TIDE">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3MjY4MDE3DU3OS1TIDE</a>	Materialize  Nina Steinback  <a href="mailto:Bewerbung@materialize.de">Bewerbung@materialize.de</a>	Bremen, Germany	Sales Application Engineer (SAE) / Application Engineer/ Application Engineer 3D Printing	<ul style="list-style-type: none"> <li>• The SAE supports our team in Bremen in establishing and maintaining lasting development partnerships with existing and new customers through the successful implementation of customer projects.</li> <li>• Develop a deep understanding of Additive Manufacturing (AM) assets and related processes.</li> <li>• Make interface between development and the customer.</li> <li>• Technical project management of customer projects</li> <li>• Coordinate the necessary activities for successful project execution.</li> <li>• Monitor key project milestones.</li> <li>• Set priorities regarding the temporal realization of projects.</li> <li>• Creation of a qualified requirement profile / requirement specifications Technical clarification of the customer application and development of first conceptual solutions in the sense of</li> </ul>		Software Engineer	<ul style="list-style-type: none"> <li>• Knowledge in data processing for AM processes.</li> <li>• Experience in determining customer requirements.</li> <li>• Experience in software development.</li> </ul>	7.11

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>economical customer problem solutions.</p> <ul style="list-style-type: none"> <li>• Competent advice of the customer in technical questions.</li> <li>• Introduction of the application knowledge in the development of technical solutions.</li> <li>• Representation of the enterprise with customers and on fairs.</li> </ul>				
			<a href="https://angel.co/company/www-podometric-com/jobs/238874-stage-ingenieur-rd-fidelisation-client-6-mois-des-juin-juillet-2019">https://angel.co/company/www-podometric-com/jobs/238874-stage-ingenieur-rd-fidelisation-client-6-mois-des-juin-juillet-2019</a>	ScientiFeet	Paris, France	R & D & Customer Loyalty Engineer	<ul style="list-style-type: none"> <li>• Participate in the development of new product features.</li> <li>• Analysis of the need (according to user feedback).</li> <li>• Pre-project / feasibility study</li> <li>• Design / Design</li> <li>• Prototyping</li> <li>• Going into production</li> <li>• Organize the quality monitoring of the production</li> <li>• Establishment and improvement of monitoring indicators</li> <li>• Follow-up of action plans</li> </ul>		AM Designer  AM Process Engineer  Software Engineer	<ul style="list-style-type: none"> <li>• Hardware</li> <li>• Engineering</li> <li>• Software</li> </ul>	7.12



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>• Test and test the web application</li> <li>• Test new deployed versions</li> <li>• Give feedback to participate in their improvement</li> <li>• Ensure a technological watch.</li> <li>• Contribute to training and user support.</li> </ul>				
			<a href="https://www.linkedin.com/jobs/search/?currentJobId=1305246518&amp;geoid=92000000&amp;keywords=additive%20manufacturing&amp;location=Worldwide">https://www.linkedin.com/jobs/search/?currentJobId=1305246518&amp;geoid=92000000&amp;keywords=additive%20manufacturing&amp;location=Worldwide</a>	3D Systems Leuven – formerly LayerWise  Livy Stier (HR manager Benelux at 3D Systems Leuven)	Leuven, Belgium	Customer Project Engineer	<ul style="list-style-type: none"> <li>• Support presale meetings from a technical point of view and support trade shows.</li> <li>• Draft proposals, (Co-)define and execute within time and budget technical customer projects.</li> <li>• Collaborate with application engineers, validation engineers, R&amp;D engineers, service and sales teams to deliver the optimal solution to the customer.</li> <li>• Technical account management throughout the duration of the customer project, including regular reporting to the different stakeholders.</li> </ul>			<ul style="list-style-type: none"> <li>• 5+ years project management experience.</li> <li>• Master's degree in engineering or science; and/or equivalent by experience.</li> <li>• Experience with Additive Manufacturing is a plus.</li> <li>• Experience in Aerospace, Healthcare or other strongly regulated</li> </ul>	7.13



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>Reporting to the Lead Manufacturing Engineer.</li> </ul>			<ul style="list-style-type: none"> <li>A team mentality that can function in a matrix organization.</li> <li>Experience in a 3D CAO / CFAO software and MS Office is a plus.</li> </ul>	

Table 11: AM Coordinator Professional Profiles.

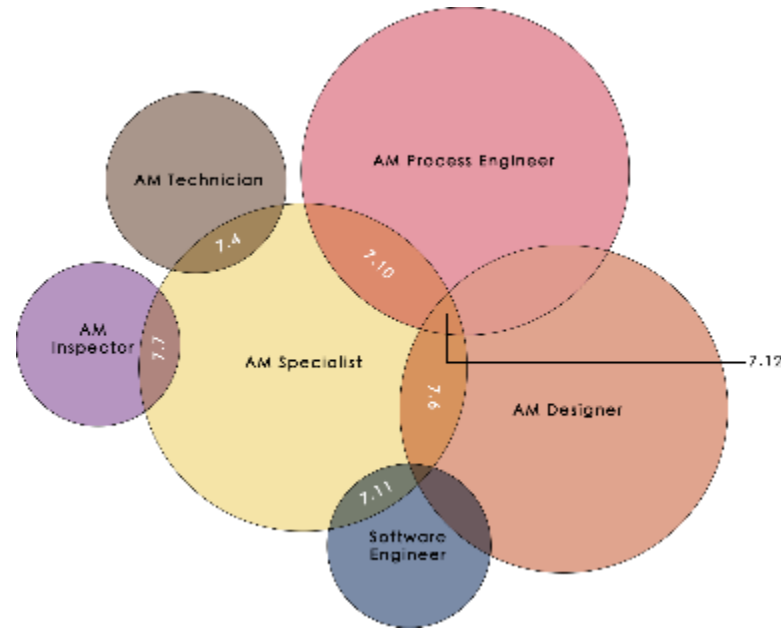


Figure 4: Types of Professional Profiles under AM Specialist/coordinator and their overlapping roles.

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
8	<b>Metrology Engineer</b>	Use their comprehensive knowledge of metrology to specify the optimal measurement method to meet the functional and manufacturing requirements of the part.	<a href="https://www.indeed.co.uk/3d-Printing-jobs?vjk=a9bd6ace0cf72e74">https://www.indeed.co.uk/3d-Printing-jobs?vjk=a9bd6ace0cf72e74</a>	E3D-Online Ltd	Oxford, UK	3D Printing Prototyping Engineer	<ul style="list-style-type: none"> <li>Helping our design engineers develop their concepts into high performance, efficiently manufacturable products through testing and iteration.</li> <li>Creating application specific test rigs in order to make testing efficient, repeatable and standardised, this may involve</li> </ul>			<ul style="list-style-type: none"> <li>Very strong hands-on ability to use a range of workshop tools and equipment to create high quality prototypes.</li> <li>Able to use parametric CAD.</li> </ul>	8.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>some electronics and programming.</p> <ul style="list-style-type: none"> <li>Carry out test plans and share results with the team, informing future iterations of designs.</li> </ul>				
			<a href="https://www.linkedin.com/jobs/view/1405230904/">https://www.linkedin.com/jobs/view/1405230904/</a>	Siemens PLM software	Flanders, Belgium	Research Engineer Additive Manufacturing	<ul style="list-style-type: none"> <li>Analyse and interpret physical phenomena relevant to the process of Additive manufacturing.</li> <li>Work together with other teams on the validated modelling of such phenomena, enabling a successful transfer of the technology into new simulation software products.</li> <li>Participate in defining, steering and executing the STS R&amp;D technology roadmap, embracing collaborations and leveraging on core technologies and scoping for/defining new R&amp;D project opportunities both at European and National level.</li> </ul>			<ul style="list-style-type: none"> <li>Masters or PhD in Engineering (Additive Manufacturing, Material Science or Mechanical Engineering).</li> <li>Solid understanding of Additive Manufacturing related machine processes and physical/chemical phenomena (e.g. metallurgy).</li> <li>A background in the computational physics modelling of Additive Manufacturing, Finite Element modelling in general, static/dynamic</li> </ul>	8.2

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://be.linkedin.com/viewjob?jk=c77eb4d1010fcd6f&amp;qd=64FCBBBcyDJAYybnfgo1Bcj0uccwCg97inSacXNb3sicb_HhMT5XdIfRQQ0dVYJCgOKVeByEihU-Ds1US_fm3mdakM2SX7pbR8T9mPBhcxvwt7H0IQL5oZSN_YRzoKFT&amp;chnl=Belgium&amp;atk=1djsb9c0dbidu800&amp;jsa=6860&amp;inchal=apiresults&amp;utm_source=">https://be.linkedin.com/viewjob?jk=c77eb4d1010fcd6f&amp;qd=64FCBBBcyDJAYybnfgo1Bcj0uccwCg97inSacXNb3sicb_HhMT5XdIfRQQ0dVYJCgOKVeByEihU-Ds1US_fm3mdakM2SX7pbR8T9mPBhcxvwt7H0IQL5oZSN_YRzoKFT&amp;chnl=Belgium&amp;atk=1djsb9c0dbidu800&amp;jsa=6860&amp;inchal=apiresults&amp;utm_source=</a>	Solvay	Brussels, Belgium,	Research Engineer for Additive Manufacturing	<ul style="list-style-type: none"> <li>• Push the boundaries of Fused Filament Fabrication of High-Performance Polymers. They will be part of a dynamic, globally growing team of professionals working towards making Solvay the leading provider of AM ready high-performance polymer material solutions.</li> <li>• Design, execute and interpret a plan of experiments in order to validate the performance of 3D printed parts.</li> </ul>			<p>strength &amp; fatigue and/or computational fluid dynamics (CFD) is a plus.</p> <ul style="list-style-type: none"> <li>• Master's degree in Materials Science in Polymers physics, characterization and processing of high-performance thermoplastics.</li> <li>• Strong "hands on" technical background (Knowledge in Additive Manufacturing is a plus).</li> <li>• Internship in polymer processing and/or dealing with structure-properties relationship of thermoplastic (thermal, mechanical &amp; rheology results interpretation).</li> </ul>	8.3

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="#">publisher&amp;utm_medium=organic_listings&amp;utm_campaign=affiliate</a>							<ul style="list-style-type: none"> <li>Having an affinity for organizing, storing and analysing data is a plus.</li> </ul>	
9	Materials Engineer	Use their comprehensive knowledge of materials to specify the optimal material to meet the functional and manufacturing requirements of the part and implement material handling processes for the entire material life cycle.	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTAwMTc0NCAY?jvDisplayLanguage=nl">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTAwMTc0NCAY?jvDisplayLanguage=nl</a>	Huntsman	Everberg, Belgium.	Senior Experimental Technologist 3D Printing	<ul style="list-style-type: none"> <li>You will carry out defined experimental tasks and report the results for the development of PU elastomers used in different markets.</li> <li>build-up relevant technical application knowledge in the elastomer field and identify own training needs.</li> <li>Ensure that all existing safety standards and procedures are fully met in accordance with existing policies and company objectives and to ensure that all experimental activities are carried out according to these standards.</li> <li>Formally and informally report the results to the Senior Technician, Technical Specialist or Technical Supervisor and keep a well-organized and detailed laboratory logbook.</li> </ul>			<ul style="list-style-type: none"> <li>Bachelor's in chemistry.</li> <li>Basic knowledge of how polyurethane works and the processing and application benefits that can be achieved Previous experience of making, characterising or working with polymers.</li> </ul>	9.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>Understand all employed techniques and routine operation. You will be able to modify existing procedures as needed.</li> <li>Carry out in-house trials to demonstrate the feasibility of the team's technical developments, with a focus on 3D printing.</li> </ul>				
			<a href="https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=9154000002097160&amp;widgetid=915400000335057&amp;embedsource=">https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=9154000002097160&amp;widgetid=915400000335057&amp;embedsource=</a>	Alexander Daniels Global	Germany	Team Leader Technology Alloys 3D Printing	<ul style="list-style-type: none"> <li>Alexander Daniels Global is working with a new start-up, which is involved in the development of high value metal powders for AM. The company has been started within a well established organisation and will offer an exciting chance to help set up and grow this new division for the business. Based in Hamburg, the role will focus on the development of powders for a variety of processes. The company requires someone with experience in both material science and</li> </ul>		AM Process Engineer	<ul style="list-style-type: none"> <li>The position requires someone with the following experience:</li> <li>Practical knowledge of the development of high-performance aluminium alloys</li> <li>Hands-on experience with the development or application of metals in additive manufacturing,</li> </ul>	9.2



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>hands-on AM process development to begin this work, and assist in growing the team. You will be involved in project management, technical sales support and in the coordination of the internal R&amp;D.</p>			<p>ideally in SLM, but any metal AM experience will be considered</p> <ul style="list-style-type: none"> <li>• Experience in leading a team or previous experience a managerial role with the ability to also be hands-on</li> <li>• Ambition to grow and develop a business with the support of a larger organisation</li> <li>• Working professional German and English</li> </ul>	

Table 12: Metrology Engineer and Materials Engineer Professional Profiles.

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
10	<b>AM Operator / Technician</b> Professionals that are able to carry out the safe and reliable production and simple post-processing of additively manufactured parts.	Operate AM machines, including fitting and setting up, maintenance and specific repairs.	<a href="https://www.cv-library.co.uk/job/210650717/Processing-Technician-3D-Printing?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=103640&amp;rx_job=210650717&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_source=adzuna&amp;utm_medium=cpc&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cb">https://www.cv-library.co.uk/job/210650717/Processing-Technician-3D-Printing?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=103640&amp;rx_job=210650717&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_source=adzuna&amp;utm_medium=cpc&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cb</a>	Bolton Recruitment (Agency)  (leading Additive Manufacturer and Precision Machining of Plastic and Metal parts and components)	West Berkshire, UK.	Processing Technician	<ul style="list-style-type: none"> <li>• Operation of Metal and Plastic Additive Manufacturing / 3D Printing machines.</li> <li>• Performing preventative maintenance of both Plastic and Metal AM (DMLS) machines.</li> <li>• Clean down and preparation of the machines before starting a new job.</li> <li>• Setting up new jobs.</li> <li>• Material change overs, sieving and control</li> <li>• Facilities maintenance.</li> <li>• Carry out Part post-processing and workshop duties when required.</li> </ul>			<ul style="list-style-type: none"> <li>• Engineering knowledge desirable.</li> <li>• Hand tool, workshop or model-making skills beneficial, good at working with your hands.</li> <li>• Facilities maintenance skills desirable (mechanical, electric, plumbing etc.) but not essential.</li> <li>• Understanding of working with materials.</li> </ul>	10.1

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<p>ccd211e9ba f0a7cf027e 13b52a517 a39976d46 2299dc633 89a465e16</p> <p><a href="https://www.adzuna.co.uk/jobs/details/1243574270?se=F9r4dd5MSCWJPKHjx8OuyQ&amp;v=F97397BA128096DC3E28939B97F808FF5C229FF0">https://www.adzuna.co.uk/jobs/details/1243574270?se=F9r4dd5MSCWJPKHjx8OuyQ&amp;v=F97397BA128096DC3E28939B97F808FF5C229FF0</a></p> <p><a href="https://www.cv-library.co.uk/job/210588480/AM-Technician?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=105131&amp;rx">https://www.cv-library.co.uk/job/210588480/AM-Technician?s=100839&amp;rx_campaign=adzuna5&amp;rx_group=105131&amp;rx</a></p>	Consult2Recruit (Agency)	Bristol, UK.	AM Technician	<ul style="list-style-type: none"> <li>• Achieving delivery of products on time and to specification.</li> <li>• Identifying areas for process improvement and optimisation.</li> <li>• Demonstrate an understanding to follow procedures in order to maintain high standards and health and safety.</li> <li>• Good manual dexterity and practical hands on skills, use of hand tools to perform some part finishing operations.</li> <li>• Capability to handle physical and manual elements of the role.</li> </ul>	<ul style="list-style-type: none"> <li>• Identifying areas for process improvement and optimisation.</li> </ul>		<ul style="list-style-type: none"> <li>• Experience in an accredited manufacturing environment.</li> <li>• Understanding of working within an ISO 9001 documentation structure.</li> <li>• at least 1 years' experience working with manufacturing machines and post processing or part finishing, (preferably 3D Printing).</li> <li>• Ability to meet and exceed project deadlines.</li> <li>• Have a keen eye for detail and excellent verbal and written</li> </ul>	10.2

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<p>_job=210588480&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_source=adzuna&amp;utm_medium=cpc&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16</p>							<p>communication skills.</p> <ul style="list-style-type: none"> <li>• Good time management</li> </ul>	
			<p><a href="https://www.cv-library.co.uk/job/210644701/3D-Printing-Technician-Jewellery?source=100551&amp;rx_campaign=adzuna5&amp;rx_group=103261&amp;rx_jo">https://www.cv-library.co.uk/job/210644701/3D-Printing-Technician-Jewellery?source=100551&amp;rx_campaign=adzuna5&amp;rx_group=103261&amp;rx_jo</a></p>	Westonbea mor (Jewellery)	Birmingham, UK.	3D Printing technician	<ul style="list-style-type: none"> <li>• Dealing with customers CAD models, checking and preparing for print.</li> <li>• Post processing models.</li> <li>• Processing orders.</li> <li>• 3D Scanning.</li> </ul>	Dealing with customers CAD models, checking and preparing for print		<ul style="list-style-type: none"> <li>• Knowledge of the lost wax casting process and general jewellery manufacturing techniques.</li> </ul>	10.3

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<p>b=210644701&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-11-13&amp;rx_viewer=695cd2cbccd211e9baf0a7cf027e13b52a517a39976d462299dc63389a465e16</p>								
			<p><a href="https://angel.co/company/prodpoint-1/jobs/437221-3d-printing-engineer-co-founder">https://angel.co/company/prodpoint-1/jobs/437221-3d-printing-engineer-co-founder</a></p>	<p>Prodpoint  Felix Fried (Founder)</p>	<p>London, UK.</p>	<p>3D Printing Engineer (Technician)</p>	<ul style="list-style-type: none"> <li>• To run maintenance and repairs on the machines.</li> <li>• To launch print jobs for our clients, design in-house samples.</li> <li>• To bring some innovative ideas to the table.</li> </ul>			<ul style="list-style-type: none"> <li>• Good CAD design, preferably some experience with Fusion 360.</li> <li>• Experience with slicing g-code files.</li> <li>• Good writing skills.</li> <li>• Experience with FDM 3D printing.</li> </ul>	<p>10.4</p>

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
										<ul style="list-style-type: none"> <li>• Python Programming.</li> <li>• Electronics design.</li> </ul>	
			<a href="https://www.indeed.co.uk/3d-Printing-jobs?vjk=c7fc3d1b9c1b5e88">https://www.indeed.co.uk/3d-Printing-jobs?vjk=c7fc3d1b9c1b5e88</a>	DCA Recruitment (Recruiter)	Birmingham, UK.	3D Printing Technician	<ul style="list-style-type: none"> <li>• Dealing with customers CAD models, checking and preparing for print.</li> <li>• Post processing models.</li> <li>• Processing orders.</li> <li>• 3D Scanning.</li> </ul>				10.5
			<a href="https://www.linkedin.com/jobs/view/1442105805/">https://www.linkedin.com/jobs/view/1442105805/</a>  <a href="https://www.glassdoor.co.uk/job-listing/additive-manufacturing-technician-oxmet-technology">https://www.glassdoor.co.uk/job-listing/additive-manufacturing-technician-oxmet-technology</a>	OxMet Technologies Ltd  Jane McArdle (Office Manager)	Oxford, UK.	Additive Manufacturing Technician	<ul style="list-style-type: none"> <li>• Responsible for operating additive manufacturing machines, post-processing the parts and managing metal powder.</li> <li>• Post-processing equipment: furnace, sand-blasting station, cutting, polishing and cleaning tools.</li> <li>• Powder sieving.</li> <li>• Maintaining quality records and ensuring traceability.</li> <li>• Install, operate, maintain, and if necessary, improve/modify the equipment.</li> <li>• Work closely with engineers, ensuring that the work is carried out according to schedule and</li> </ul>		AM Inspector	<ul style="list-style-type: none"> <li>• At least 3 years of relevant experience in an industrial or research environment.</li> <li>• Experience operating and maintaining industrial equipment (e.g.: machining, laser cutting, additive manufacturing, heat-treating, sieving, etc).</li> <li>• Skilled in the use of hand tools including</li> </ul>	10.6

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			s- JV_IC33804 71_KO0,33 _KE34,52.ht m?jl=33263 37591&ctt= 156743067 8091				following the established procedures.			wrenches, Dremel, measuring devices, etc.	
			<a href="https://www.linkedin.com/jobs/view/1147879618/">https://www.linkedin.com/jobs/view/1147879618/</a>	Haus Careers (Recruiter)	London, UK.	Model maker Technician	<ul style="list-style-type: none"> <li>Assist the Model Shop Manager in the smooth running of model shops.</li> <li>Assisting in the development and use of 3D print technology</li> <li>Training and tutoring staff on equipment usage and best practice techniques.</li> <li>Ensuring both model shops are maintained to a high standard as well as some direct model making and construction from time to time.</li> </ul>	<ul style="list-style-type: none"> <li>Training and tutoring staff on equipment usage and best practice techniques.</li> </ul>	AM supervisor	<ul style="list-style-type: none"> <li>Degree in model making.</li> <li>Experience of 3D Printing systems and relevant software.</li> <li>Experience delivering training.</li> </ul>	10.7
			<a href="https://www.indeed.co.uk/3d-Printing-jobs?advn=4558960259117344&amp;vjk=e8358810da2b3aed">https://www.indeed.co.uk/3d-Printing-jobs?advn=4558960259117344&amp;vjk=e8358810da2b3aed</a>	Graphite Additive Manufacturing	Aylesbury, UK.	3D Printing Technician	<ul style="list-style-type: none"> <li>Assist with the manufacturing life cycle of 3D Printing.</li> <li>Produce and finish parts accurately to customer specifications.</li> <li>Washing and cleaning of 3D printed parts.</li> <li>Packing parts ready for shipping.</li> </ul>				10.8

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/ZGZjMzQwNWYtOTA0YS00ZTRjLTg2ZWMTYzcwOTRmZjEyZWQxIDQy">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/ZGZjMzQwNWYtOTA0YS00ZTRjLTg2ZWMTYzcwOTRmZjEyZWQxIDQy</a>	FMI Precision  Wenzel Hurtak  <a href="mailto:w.hurtak@21groep.nl">w.hurtak@21groep.nl</a>	Bergen op Zoom, Netherlands,	Production Engineer	<ul style="list-style-type: none"> <li>• Work preparation and preparation of machine files for production.</li> <li>• Operating the AM machines, the accessories and supervising the progress of the production.</li> <li>• Process monitoring and, where possible, process optimization.</li> <li>• Administration of work preparation in our ERP system (ISAH).</li> <li>• Organizing test samples.</li> <li>• Optimize material verification.</li> <li>• Preparation of progress and test reports.</li> <li>• Support in the projects from start-up phase to series production.</li> <li>• Preparation and improvement of work instructions</li> </ul>	<ul style="list-style-type: none"> <li>• Organizing test samples.</li> <li>• Optimize material verification.</li> </ul>			10.9
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3Mz11NTY5NS1TIDE">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3Mz11NTY5NS1TIDE</a>	RILE- Group	Deggen dorf, Germany.	Production Technologist	<ul style="list-style-type: none"> <li>• Preparation of 3D models for additive processes.</li> <li>• Equipment setup (preparation, material change, calibration).</li> <li>• Planning and monitoring of production orders - Unpacking and post-processing of components.</li> <li>• Raw material processing.</li> <li>• Inspection / quality assurance of printed components.</li> <li>• Support of the project process (creative ideas desired!),</li> </ul>	<ul style="list-style-type: none"> <li>• Raw material processing.</li> </ul>	AM Inspector	<ul style="list-style-type: none"> <li>• Training as a production engineer, industrial mechanic or similar.</li> <li>• Training as a technician.</li> </ul>	10.10



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTIzNjItUFVCMjI3MjkwXzEOMTEwNUxTLVMgMQ?jvDisplayLanguage=de">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTIzNjItUFVCMjI3MjkwXzEOMTEwNUxTLVMgMQ?jvDisplayLanguage=de</a>	Brunel GmbH  Tanja Oberzeiler  t.oberzeiler@brunel.net	Munich, Germany.	Specialist additive manufacturing processes (technician - mechanical engineering)	<ul style="list-style-type: none"> <li>You perform responsible work in the Additive Manufacturing Centre for the economical use of innovative laminating technologies.</li> <li>You are also responsible for the production of plastic components using 3D printing for prototype use.</li> <li>In addition, you assist in setting up the production facilities and independently start the construction processes.</li> <li>Finally, you work on the components by means of blasting media.</li> </ul>			<ul style="list-style-type: none"> <li>Successfully completed training as a modeler, process mechanic or equivalent qualification.</li> <li>Experiences with 3D printing, laser sintering and stereolithography.</li> <li>Good knowledge with the CAD software Catia V5 desired.</li> </ul>	10.11
			<a href="https://job-openings.monster.co.uk/quereinstellungen-3d-druck-m-w-koblach-vat-robotmech-rapid-prototyping">https://job-openings.monster.co.uk/quereinstellungen-3d-druck-m-w-koblach-vat-robotmech-rapid-prototyping</a>	Robotmech Stössl GmbH	Koblach, Austria.	Newcomers to Industrial 3D Printing	<ul style="list-style-type: none"> <li>Creation of high-quality layer components.</li> <li>Capacity planning and data preparation.</li> <li>Parameterization of layer construction plants.</li> <li>Machine operation / postprocessing, regular machine maintenance, <b>quality assurance</b>.</li> <li>continuous process control and process optimization.</li> </ul>		AM Designer  AM Inspector	<ul style="list-style-type: none"> <li>Good spatial imagination.</li> <li>MS Office knowledge.</li> <li>CAD knowledge beneficial.</li> </ul>	10.12

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			st%C3%B6ssel-gmbh/70b89739-8eb9-43f8-8ec3-95139a252cea?mescoiid=5100958001001								
			<a href="https://www.adzuna.co.uk/jobs/details/1241642362?searchUOM0FO_TFizb6FbiYsXeA&amp;v=D5A7E38D4553CAC928599DF5BF37DA2E07D13D24">https://www.adzuna.co.uk/jobs/details/1241642362?searchUOM0FO_TFizb6FbiYsXeA&amp;v=D5A7E38D4553CAC928599DF5BF37DA2E07D13D24</a>	Prodpoint  (FDM Printing Production)	London, UK.	3D Printing Intern	<ul style="list-style-type: none"> <li>• Manage production.</li> <li>• Design pieces to spec on CAD software Fusion 360.</li> </ul>	AM designer  AM Operator/ Technician	-must have some experience with FDM 3D printing.  - You must be skilled with CAD. Fusion 360 preferable.	•	10.13

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTEONTcxZjtZTAwZS00OTc5LWI2MWQtYzNmYTliN2lwNDQ2lDM?jvDisplayLanguage=nl">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTEONTcxZjtZTAwZS00OTc5LWI2MWQtYzNmYTliN2lwNDQ2lDM?jvDisplayLanguage=nl</a>	Jobat (Agency)	Belgium	Technical Operator (Laser Cladding)	<ul style="list-style-type: none"> <li>• you are responsible for starting up, checking and finishing production according to production regulations.</li> <li>• Clamping workpieces.</li> <li>• Preparing the clad installation according to work instructions.</li> <li>• Programming the robot for the correct application of the clad layer.</li> <li>• -Correct division of production time for optimum production flow.</li> </ul>				10.14
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MjcONWVjMmEtYWVmNS00M2l2LW E4NjgtYjZn">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MjcONWVjMmEtYWVmNS00M2l2LW E4NjgtYjZn</a>	AVC Gemino nv	Harelbeke, Belgium	3D Printing Engineer	<ul style="list-style-type: none"> <li>• Your task is to implement and manage the day-to-day operational.</li> <li>• Order intake and confirmation to customers.</li> <li>• Helping customers with redesigning / engineering for metal 3D.</li> <li>• Organizing and planning the productions.</li> <li>• Work preparation and engineering.</li> </ul>		AM Designer  AM Process Engineer		10.15

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			zVjZWVhMjI3IDM				<ul style="list-style-type: none"> <li>Starting up productions and maintenance machines.</li> <li>Perform the after-treatment steps of the process for complex projects.</li> <li>Take care of possible post-processing yourself.</li> <li>Organize necessary outsourcing.</li> </ul>				
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTc1MSAxMjE">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTc1MSAxMjE</a>	GEHC	Uppsala, Sweden	AM Technician	<ul style="list-style-type: none"> <li>Set-up weekly additive manufacturing builds.</li> <li>Hands-on work with running the machines and post processing (powder removal) of manufactured parts.</li> <li>Be part of installing and running new AM equipment.</li> <li>Develop new techniques for making the work more efficient.</li> <li>Maintain and develop skills to be able to deliver what's expected in the role.</li> <li>To be able to plan and deliver on agreed tasks. -Report progress and deviation from plans.</li> <li>Deliver other tasks from manager.</li> <li>Deliver all tasks according to GEHC directive and guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>Be part of installing and running new AM equipment.</li> </ul>		<ul style="list-style-type: none"> <li>Working experience with powder based Additive machine operation.</li> <li>Basic knowledge and awareness of AM build preparations (like Magics).</li> <li>Demonstrated troubleshooting and structural way of working.</li> <li>Ability to work independently and to interact as part of a team environment.</li> </ul>	10.16

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.3dnatives.com/en/job/director-of-design-prototyping/">https://www.3dnatives.com/en/job/director-of-design-prototyping/</a>	Ford Motor Company	Not specified (Anywhere)	Director of Design Prototyping	<ul style="list-style-type: none"> <li>Act as a design evaluation specialist for teams, building to think through problems, from simple mock-ups of handheld designs to full scale environments.</li> <li>Be comfortable partnering with project teams to build to learn – promoting prototyping as a method to explore, test and learn from early concept ideas at all stages of the digital and product development cycle.</li> <li>Supervise daily operations for the prototyping maker space, equipment, and project workflow, with meticulous attention to detail.</li> <li>Build a platform of software and hardware tools to facilitate the rapid prototyping of defined user experiences.</li> <li>Help teams prepare project proposals and bids including cost estimates and resource allocation.</li> <li>Work with design teams to help them experiment with a range of tools and methods to execute on research plans and prototype development.</li> <li>Deliver all projects to date on time and as specified, prioritizing</li> </ul>		<p>AM Supervisor</p> <p>AM Process Engineer</p>	<ul style="list-style-type: none"> <li>Bachelor's Degree in Mechanical Engineering, Mechatronics, Electrical Engineering, Industrial Engineering.</li> <li>7+ years of experience using deep technical knowledge and hands-on experience in human-centered design, human-machine interfaces, software / hardware prototyping.</li> <li>5+ years of experience leading creative teams and communities in physical/digital prototyping.</li> </ul>	10.17

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<ul style="list-style-type: none"> <li>different workloads across project teams.</li> <li>Work with external vendors and internal shop experts, at times helping them understand how to deliver what our teams need for software/hardware deliverables.</li> <li>Manage contracts and maintenance of shop equipment and tools.</li> </ul>				
			<a href="https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OGNmODcyZmQtMjk1OS00MmYzLWI4ZDktYzUzNWVlYTU0NDJkIDM?jvDisplayLanguage=nl">https://ec.europa.eu/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OGNmODcyZmQtMjk1OS00MmYzLWI4ZDktYzUzNWVlYTU0NDJkIDM?jvDisplayLanguage=nl</a>	COLRUYT GROUP SERVICES	Halle-Vilvoorde, Belgium.	Production Manager for Printing and Finishing	<ul style="list-style-type: none"> <li>Assume full operational responsibility.</li> <li>Coaching your people is an important aspect here. You ensure that they can do their work under optimal conditions, you guide them through change processes, and you listen to their wishes and needs. This way you ensure that your employees enjoy their job and you ensure that they achieve their operational objectives. At the same time, you support your employees in their personal growth.</li> <li>You also promote a continuous culture of improvement. You put your shoulder to process optimization, new projects and investments. You make new work</li> </ul>		AM Supervisor  AM Process Engineer		10.18

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
							<p>agreements and responsibilities. For example, you also implement best practices, make pro and reactive analyses of products and services and thus optimize lead times, quality, efficiency.</p> <ul style="list-style-type: none"> <li>• you also develop close cooperation with the managers of the other teams within the production department. You exchange best practices, experiences and learnings and are each other's back-ups.</li> </ul>				
			<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/ODgwMWE4ZjktYT15Mi00ZTFkLThkNzQtYzZINWE3MjdjNjQ1DM?jvDisplayLanguage=nl">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/ODgwMWE4ZjktYT15Mi00ZTFkLThkNzQtYzZINWE3MjdjNjQ1DM?jvDisplayLanguage=nl</a>	Materialise	Leuven, Belgium.	Production Employee	<ul style="list-style-type: none"> <li>• Primer and polysurfacers on our 3D-printed projects.</li> <li>• Handle simpler colour projects.</li> </ul>				10.19

No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			<a href="https://www.linkedin.com/jobs/view/1404521014/">https://www.linkedin.com/jobs/view/1404521014/</a>  <a href="https://www.indeed.co.uk/3d-Printing-jobs?vjk=a0f2d5590ab3b0e9">https://www.indeed.co.uk/3d-Printing-jobs?vjk=a0f2d5590ab3b0e9</a>	McLaren Group (Automotive)	Woking, UK.	Rapid Prototype Finisher	<ul style="list-style-type: none"> <li>• Finishing and fittings.</li> <li>• Taking unfinished 3D printed components and preparing them for fitting to the F1 cars and to the models.</li> </ul>				1020
			<a href="https://job-openings.monster.be/productiearbeider-3d-printing-leuven-flemish-brabant-be-impact/209771305">https://job-openings.monster.be/productiearbeider-3d-printing-leuven-flemish-brabant-be-impact/209771305</a>  <a href="https://ec.europa.eu/eures/searchengine/page/main?lang=en&amp;app=4.1.1p">https://ec.europa.eu/eures/searchengine/page/main?lang=en&amp;app=4.1.1p</a>	IMPACT	Leuven, Flemish - Brabant, Belgium.	Production worker 3D Printing (Finisher)	<ul style="list-style-type: none"> <li>• Remove part from the 3D printer.</li> <li>• Remove the support around the printed piece</li> <li>• Cleaning / cleaning the printed part.</li> <li>• Pass the piece on to the right department.</li> </ul>				1021



No.	Name of Professional Profile	Description of Professional Profile	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			5-build-1#/jv-details/YmZiZGFjMGEtNmMwNy00YTY3LTlkMTetZjM3YzJmOTE4OTg1IDM  leuven@impact.be								

Table 13: AM Operator/ Technician Professional Profiles.

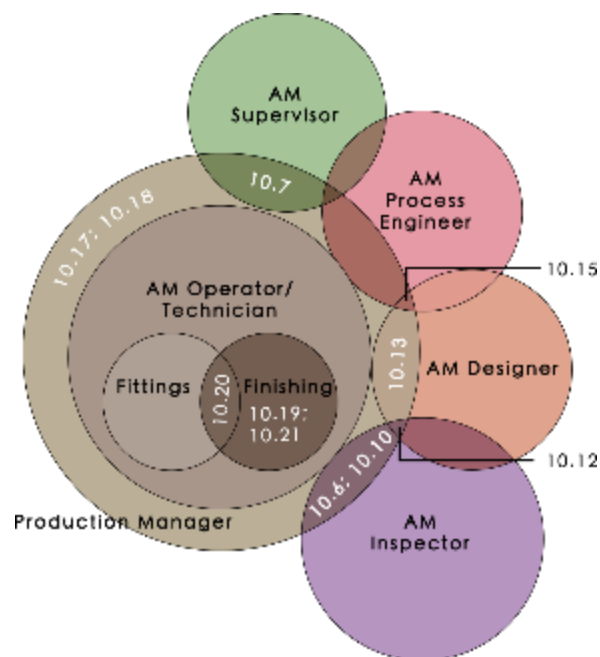


Figure 5: Types of Professional Profiles under AM Operator/ Technician and their overlapping roles.

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
11	Others	Business development and Project management	System Product Manager	<a href="https://www.linkedin.com/jobs/view/1354574087/">https://www.linkedin.com/jobs/view/1354574087/</a>	Alexander Daniel Global (Recruiter)	Barcelona, Spain	System Product Manager	<ul style="list-style-type: none"> <li>Manage the products from the portfolio throughout their lifecycle.</li> <li>Understand clearly the target markets and the key customers.</li> <li>Be the link between the customer requirements and the R&amp;D team.</li> </ul>			<ul style="list-style-type: none"> <li>Skilled in translating customer requirements into addressable goals.</li> <li>influence the roadmap of hardware,</li> </ul>	11.1

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>• Improve and develop the strategic plans to support the entire product portfolio.</li> <li>• Define the systems in the product portfolio that connect the solutions with the customer problems.</li> <li>• Define and create the way the digital manufacturing systems create value for the business in the future.</li> </ul>			software, materials and services.	
			Applications Engineering Manager	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/NDMOOTQgMTix?jvDisplayLanguage=sv">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/NDMOOTQgMTix?jvDisplayLanguage=sv</a>	GE Healthcare  Bio Sciences  Jimmie Beacham (Chief Engineer - Advanced manufacturing Engineering)  jimmie.beacham@	Uppsala, Sweden.	Additive Engineering Program Manager – Life Sciences	<ul style="list-style-type: none"> <li>• Driving global teams to ensure that the additive solutions are part of the pulling programs, helping teams brain storm and understand how Additive designs can help them and getting the right design and process experts aligned to go from concept to transfer into manufacturing.</li> <li>• Establishing working relationships with the various global design teams and build a mechanism to drive additive awareness and identify opportunities where Additive can give our products competitive advantage in performance, cost or quality.</li> <li>• Ensure that we follow the Additive design and process</li> </ul>			<ul style="list-style-type: none"> <li>• MS/PHD in technical concentration/field.</li> <li>• Major experience in Mechanical Engineering.</li> <li>• 6-sigma DMAIC &amp; DFSS certified.</li> <li>• Strong working knowledge of PRD milestones.</li> <li>• Domain expertise in the field of additive manufacturing and metallurgical technologies.</li> <li>• Solid working knowledge of GEHC QMS</li> </ul>	1 1. 2

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
					med.ge.com			<p>development milestones so that there is clear path from concept, business case, make/buy all the way through design transfer.</p> <ul style="list-style-type: none"> <li>• Make sure that as more Additive applications are identified, they are part of the NPI or VCP programs and help make sure that the Additive design and process engineers are given clear milestone dates and deliverables.</li> <li>• Coach and mentor the Additive design engineers to accelerate some key projects to get Additive designs into our products.</li> <li>• Manage a schedule of when and where Additive training is needed ranging from Awareness through more advanced Additive techniques.</li> <li>• Help manage the resources from GE Additive where needed to make sure they are tied critical projects and they have clearly defined deliverables.</li> <li>• Support how Additive design controls and our QMS intersect while providing guidance for simplification and design rigor.</li> </ul>			<p>procedures for GMP.</p> <ul style="list-style-type: none"> <li>• Demonstrated program or project management skills</li> <li>• Experience working with global teams</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			Project Management along the AM value chain	<a href="https://www.cv-library.co.uk/job/210259706/Applications-Engineering-Manager?as=100839&amp;rx_campaign=adzuna&amp;rx_group=103277&amp;rx_job=210259706&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf">https://www.cv-library.co.uk/job/210259706/Applications-Engineering-Manager?as=100839&amp;rx_campaign=adzuna&amp;rx_group=103277&amp;rx_job=210259706&amp;rx_medium=cpc&amp;rx_source=Adzuna&amp;utm_medium=cpc&amp;utm_source=adzuna&amp;utm_content=adz_2011-3&amp;rx_viewer=695cd2cbccd211e9baf0a7cf</a>	Orion Electrotech (Agency)	Berkshire, UK.	Applications Engineering Manager	<ul style="list-style-type: none"> <li>• Direct Management of Applications Engineer and Team Leaders within manufacturing.</li> <li>• Review and improve best use of, skills, materials, capacity &amp; technologies within the business.</li> <li>• Day-to-day management of Training Programmes for both internal and external customers.</li> <li>• Managing key customers projects and be involved indirectly in other projects in the business.</li> <li>• Work closely with Production and project manage any new AM machine installs.</li> <li>• Provide technical inputs for auditing.</li> </ul>			<ul style="list-style-type: none"> <li>• 3 to 5 years minimum working within 3D Printing &amp; Additive Manufacturing.</li> <li>• Extensive experience with 3D Printing/Additive Manufacturing and having leadership or management experience.</li> </ul>	11.3

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				027e13b5 2a517a399 76d46229 9dc63389a 465e16								
			Business Development Manager	<a href="https://jobs.3dprintingindustry.com/jobs/16440025-3d-printing-vertical-business-development-manager-f-m-d-at-hp-deutschland-gmbh">https://jobs.3dprintingindustry.com/jobs/16440025-3d-printing-vertical-business-development-manager-f-m-d-at-hp-deutschland-gmbh</a>  <a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-</a>	HP Deutschland GmbH	Böblingen, Germany	3D Printing Vertical Business Development Manager	<ul style="list-style-type: none"> <li>Align plan for vertical market penetration in region (scope, applications, approach, etc.) in partnership with sales.</li> <li>Prioritize applications that are best fit / best value prop with HP technology.</li> <li>Establish list of high value customer candidates, thorough combination of leads from sales, personal contacts, networking events, etc.</li> <li>Work collaboratively with sales to prioritize pursuit candidates.</li> <li>Pull together pursuit team and build project plan w customer.</li> <li>Establish ties and work through workshops w customers to build shared business cases.</li> <li>Establish linkages with internal HP orgs to build business case for pursuit based on likely investment &amp; return.</li> </ul>			<ul style="list-style-type: none"> <li>Engineering background plastics is a plus, with an MBA ideal.</li> <li>5 years' experience in customer-facing business development or solution selling role.</li> <li>Deep domain knowledge and experience as practitioner in one or more of the following fields: Footwear, Eyewear, or other CPG, Industrial and automation; preferably 5 years or more.</li> <li>Deep business acumen; able to effectively assess</li> </ul>	11.4
						Spain	Business Development Manager					

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				<a href="#">1#/jv-details/MjczNjA1DEwMg</a> (Spain)  <a href="https://empleate.gob.es/empleo/#/oferta/1892238204">https://empleate.gob.es/empleo/#/oferta/1892238204</a>							business impact potential and structure business cases (investment & return) for both HP and customer. <ul style="list-style-type: none"> <li>• Experience in working with cross-functional teams including Electrical Engineering, Mechanical Engineering, Software, Industrial/Product Design, Sales, Marketing, Finance, Supply Chain, Customer Support, Partnerships, and Legal teams.</li> <li>• Design for additive manufacturing or advanced manufacturing experience.</li> <li>• Excellent communication and business</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>problem solving skills.</li> <li>• Agile and entrepreneurial growth mindset.</li> <li>• Ability to lead in a matrix organization.</li> <li>• Strong team player.</li> </ul>	
			R & D Project Management	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTAwMDAtMTE3MzkzNjAxNS1TIjE?jvDisplayLanguage=de">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTAwMDAtMTE3MzkzNjAxNS1TIjE?jvDisplayLanguage=de</a>	Evonik Creavis GmbH	Recklinghausen, Germany	Project Manager Additive Manufacturing (Chemist)	<ul style="list-style-type: none"> <li>• Professional management of complex, strategic R &amp; D projects in the field of reactive polymer systems.</li> <li>• Independent identification and processing of new project ideas in the innovation field Direct Manufacturing.</li> <li>• Carrying out market, potential and technology analyses.</li> <li>• Preparation of concept and feasibility studies, in particular considering economic aspects</li> <li>• Observation of relevant property rights, as well as cooperation in the creation of property rights.</li> <li>• Support in the preparation and processing of publicly funded projects and collaborations.</li> </ul>			<ul style="list-style-type: none"> <li>• University degree in Chemistry / Materials Science or Process Engineering or a comparable degree course, ideally completed with a doctorate.</li> <li>• Ideally several years of professional experience in project management.</li> <li>• Experience in the development of additive manufacturing technologies and materials beneficial.</li> </ul>	11.5



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			Business Development Manager	<a href="https://i-amdigital.com/opportunities/business-development-manager-northern-germany-1">https://i-amdigital.com/opportunities/business-development-manager-northern-germany-1</a>	Ultimaker	Germany	Business Development Manager	<ul style="list-style-type: none"> <li>Helping to develop a growth strategy focused on both financial gain and customer satisfaction</li> <li>Maintaining and expanding the Ultimaker brand credibility and market position</li> <li>Maintaining extensive knowledge of current market conditions, conducting research to identify new markets and customer needs in close conjunction with Market Intelligence</li> <li>Arranging business meetings with prospects and clients</li> <li>Helping global customers improve their design or manufacturing processes with 3D printing, as a valuable business consultant</li> <li>Building and defending business cases and management team presentations with stakeholders</li> <li>Leading the process from site scan, to pilot project, to global contract</li> </ul>			<ul style="list-style-type: none"> <li>BSc/BA in Business Administration, Sales, or similar, with 7+ years of experience in an international sales environment</li> <li>Proven work experience as a Business Development Manager, Key Account Manager/Consultant, or a relevant commercial role</li> <li>Experience working in a German environment</li> <li>Specific market knowledge, such as Manufacturing</li> </ul>	11.6

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>• Creating and leading project teams to facilitate the implementation of customers' 3D printing needs</li> <li>• Leading the bid process</li> <li>• Promoting printers' applications addressing or predicting clients' needs and objectives</li> <li>• Initiating pilot projects in line with customer needs</li> <li>• Building long-term relationships with new and existing customers</li> <li>• Working closely with other company departments such as Marketing, Sales, Market Intelligence, Product Management, and R&amp;D</li> <li>• Working in multidisciplinary teams and with different stakeholders in joined projects</li> <li>• Reporting on sales funnel and project progress.</li> </ul>			<ul style="list-style-type: none"> <li>• /Engineering, Automotive/Aerospace, Medical, or other markets, with a relevant network in Germany</li> <li>• Strong project management skills</li> <li>• Excellent communication and negotiation skills</li> <li>• Good interpersonal skills, with the ability to negotiate and communicate at different levels</li> <li>• Ability to build rapport</li> <li>• A flexible attitude and the capability to work under pressure</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>Strong analytical skills and a productive attitude that works towards solutions</li> <li>Ability to share your thoughts and to work with colleagues from different backgrounds</li> <li>Excellent English and German speaking and writing skills</li> </ul>	
			3D Printing Plastics Product Development Manager	<a href="https://iamdigital.com/opportunities/3d-printing-plastics-product-development-manager-f-m-d">https://iamdigital.com/opportunities/3d-printing-plastics-product-development-manager-f-m-d</a>	HP	Germany	3D Printing Plastics Product Development Manager	<ul style="list-style-type: none"> <li>Lead efforts for customer application development with a production focus for the automotive vertical.</li> <li>Ensure on-time delivery of customer applications and manage customer satisfaction.</li> <li>Build great collaborative</li> </ul>			<ul style="list-style-type: none"> <li>Engineering background (Mechanical Engineering, Plastics Engineering, Material</li> </ul>	11.7

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>relationships between our HP 3D printing business unit and our customers, to enable the design and engineering of extraordinary experiences and applications.</p> <ul style="list-style-type: none"> <li>• Partner cross-functionally with Engineering, Sales, Marketing, Finance and other product teams to understand their objectives &amp; opportunities for alignment.</li> <li>• Establish release and application launch schedules with engineering and operations.</li> <li>• Manage Application life-cycle from initial analysis through re-design and productization.</li> <li>• Work with Sales, R&amp;D to engineer the best technology &amp;</li> </ul>			<p>science ) with an MBA ideal.</p> <ul style="list-style-type: none"> <li>• Excellent communication and business problem solving skills.</li> <li>• Excel at bridging the technical and business domains to deliver products.</li> <li>• Proven experience in DFX</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>experience for 3D printing customers.</p> <ul style="list-style-type: none"> <li>• Work with Automotive customers to develop performance specifications for MJF process and materials.</li> <li>• Support business development efforts as needed.</li> </ul>			<p>(design for) techniques and tools: design for manufacturability, design for cost, design for quality, design for value. Topology optimization and simulation is a plus.</p> <ul style="list-style-type: none"> <li>• Knowledge of CAD, CAE,</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											CAM, cloud, analytics, IoT, manufacturing systems, digital thread, digital enterprise systems (ERP, PLM, CRM) and/or professional services. <ul style="list-style-type: none"> <li>• Experience with plastics component procurement and supply</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											chain development within the automotive vertical • Demonstrated expertise in some of the following areas: Plastics Materials, 3DP, mechanical part design, new product development, manufa	

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											cturing, supply chain, process characterization, and quality management. <ul style="list-style-type: none"> <li>• Understanding of the relationships and implications between digitization and manufacturing operations, key performance metrics, supply</li> </ul>	



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											<ul style="list-style-type: none"> <li>chain and logistics.</li> <li>• Professional services, strategic consulting and/or solution selling experience is highly valued, as well as a depth of knowledge of automotive vertical.</li> <li>• Involvement</li> </ul>	

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											<p>with professional societies such as IDSA, SPE, SME, or ASME with a proven ability to present at seminars and conferences.</p> <ul style="list-style-type: none"> <li>• Excellent written and verbal communication skills. Mastery in English and</li> </ul>	

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											<ul style="list-style-type: none"> <li>German.</li> <li>Agile/Entrepreneurial mindset.</li> <li>Ability to lead in a matrix organization.</li> <li>Strong team player.</li> </ul>	
			Strategic Partner Manager	<a href="https://i-amdigital.com/opportunities/strategic-account-manager-for-3d-printing-1">https://i-amdigital.com/opportunities/strategic-account-manager-for-3d-printing-1</a>	Alexander Daniels Global,	GERMANY	Strategic Account Manager for 3D printing	<ul style="list-style-type: none"> <li>Take the lead in managing the relationship with senior leadership inside the partner company.</li> <li>Help build the scope of the leading automotive OEM contract, working closely with stakeholders in the leading automotive OEM and the partner company.</li> </ul> <p>Work with strategic business development to help expand the reach of this new technology into further automotive OEMs.</p>			<ul style="list-style-type: none"> <li>Experience of managing strategic accounts and be capable of networking at C level.</li> <li>Previous experience of managing large Automotive OEMs as a strategic partner/account manager</li> </ul>	11.8

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>-Help to build the scope of the contract, working closely with stakeholders in the leading automotive OEM and the partner company.</li> <li>-work with strategic business development to help expand the reach of this new technology into further automotive OEMs.</li> </ul>			<ul style="list-style-type: none"> <li>within a high tech business or consulting firm (As an example the type of companies you will have worked with previously might include BMW, Audi, VW, Ford, GM).</li> <li>You understand engineering solutions and be able to sell at a strategic level.</li> <li>You have exceptional communication and networking abilities.</li> <li>You live and work in Germany so business German is a</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>requirement of this role.</li> <li>You have a desire and interest in working with 3D printing / additive manufacturing solution</li> </ul>	
			Vertical Product Managment, and Marketing	<a href="https://iamdigital.com/opportunities/vertical-product-manager-marketing-lead-3d-printing">https://iamdigital.com/opportunities/vertical-product-manager-marketing-lead-3d-printing</a>	HP	SPAIN	Vertical Product Manager Marketing Lead 3D Printing	<ul style="list-style-type: none"> <li>Identify drivers &amp; barriers for the adoption of 3D printing in the verticals/Segments MJF is targeting, (Mobility &amp; Transportation, Healthcare, Consumer Goods &amp; Electronics, Industrial)</li> <li>Sizing of the Market by Industry, segment and sub-segment.</li> <li>Overview of promising application per segment &amp; sub-segment and clusters of applications.</li> </ul>			<ul style="list-style-type: none"> <li>Knowledge and Skills Required</li> <li>BA/BS in Engineering, Business, Economics or similar. MBA desired.</li> <li>Customer facing</li> </ul>	11.9

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>• Relevance of AM and MJF for the main applications cluster per sub-segment.</li> <li>• Identify winning Applications within each segment and sub segment to increase the TAM for HP</li> <li>• Opportunity assessment per application</li> <li>• Definition of main players &amp; potential customers to explore applications</li> <li>• Understand the requirements to target that market.</li> </ul>			<ul style="list-style-type: none"> <li>• experience</li> <li>• Excellent Project management skill</li> <li>• Advanced written and verbal communication, presentation, and persuasion skills; mastery in English.</li> <li>• Vertical knowledge in any of the segments MJF</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<p>is playing, especially Healthcare &amp; Medical</p> <ul style="list-style-type: none"> <li>• Consulting background</li> <li>• Manufacturing Experience related with 3D printing</li> <li>• Excellent business acumen, technical knowledge within</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											multiple business units, and extensive knowledge in applications, technologies, and emerging industry trends <ul style="list-style-type: none"> <li>Typically, 10+ years of experience on vertical businesses such as Healthcare, medical</li> </ul>	



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											l, eyewar e involve d in 3D Printin g  <ul style="list-style-type: none"> <li>• Knowle d ge and skills Desired</li> <li>• 3DP Experti se, especia lly in healthc are &amp; Medica l devices vertical s.</li> <li>• SW experti se/ SW and IOT</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>expertise</li> <li>Plastics /Manufacturing expertise</li> <li>Travel requirement: 70%</li> <li>Location: Barcelona</li> </ul>	
		Operational Division	Head of 3D Printing	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3MzY">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MTAwMDAtMTE3MzY</a>	Doob Group AG	Germany	Head of 3D Printing	<ul style="list-style-type: none"> <li>You are responsible for the smooth running of all production steps, from the digital model to the shipment of the product and are responsible for the further development and adherence to production, productivity, quality and occupational safety standards.</li> </ul>			<ul style="list-style-type: none"> <li>Expertise in 3D printing technology (ideally with ProJet 660Pro certification).</li> </ul>	1 2. 1

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				4MTMxM C1TIDE								
			Leader of staff and operations	<a href="https://jobs.3dprintingindustry.com/jobs/16957068-project-manager-at-kodama-technologies-gmbh">https://jobs.3dprintingindustry.com/jobs/16957068-project-manager-at-kodama-technologies-gmbh</a>	Kodama Technologies GmbH	Berlin, Germany.	Project Manager	<ul style="list-style-type: none"> <li>Leading our staff and operations, set data-based budgets and deadlines, and guide the company to ensure they're met on time.</li> <li>You will work independently as the CEO's right hand to manage human and financial resources, put processes in place, and make sure the company is managed and run smoothly.</li> </ul>			<ul style="list-style-type: none"> <li>Previous work experience in a similar managerial role.</li> <li>Ability to manage and empower a team of engineers and a multicultural team.</li> <li>Teamwork, organisational, and problem-solving skills required.</li> <li>Project Management experience a must, certified PMP, Prince2 preferable.</li> <li>Preferably holding a degree in an Engineering field or Business/Project Management.</li> </ul>	1 2. 2

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			Head of Production	<a href="https://www.adzuna.co.uk/jobs/details/1119231838?se=_BUyeclGQqa3bhKdahekYg&amp;v=7EC0FEA5A25B16EB050A071210A959ABC8D28A1A">https://www.adzuna.co.uk/jobs/details/1119231838?se=_BUyeclGQqa3bhKdahekYg&amp;v=7EC0FEA5A25B16EB050A071210A959ABC8D28A1A</a>  <a href="https://www.adzuna.co.uk/jobs/details/1161230494?se=PXcbECrcQ_OEzo1KtLRn2Q&amp;v=2BCEB4F096C0E9978CDA05215DFA05215DF963E8E0E6D20B">https://www.adzuna.co.uk/jobs/details/1161230494?se=PXcbECrcQ_OEzo1KtLRn2Q&amp;v=2BCEB4F096C0E9978CDA05215DFA05215DF963E8E0E6D20B</a>	Petrie Recruitment	Caerphilly, Wales, UK.	Development Engineer (Contract)  Lead Development Engineer (Permanent)	<ul style="list-style-type: none"> <li>• Development and on time delivery of systems and components.</li> <li>• Creation and development of 3D CAD data and engineering drawings.</li> <li>• Leading of design for manufacture activities in co-ordination with manufacturing team.</li> <li>• Perform tolerance analysis, DFMEA's, clearance analysis.</li> <li>• Customer communication for new product developments.</li> <li>• Co-ordination with teams in other locations, including China, Japan and US.</li> <li>• Lead prototype activities; including external supplier co-ordination and in-house 3D printing.</li> <li>• Development testing of new products.</li> <li>• Data management in PLM system and management of data with customers.</li> <li>• Application of internal and customer OEM standards in design and CAD data quality.</li> <li>• Lead and participate in Design and Drawing Reviews.</li> </ul>		AM Process Engineer  AM Designer  AM Technician  NDT Technician  AM Coordinator	<ul style="list-style-type: none"> <li>• Degree in Engineering or a comparable education.</li> <li>• Experience in CATIA 3D CAD system is required; minimum 5 years' experience.</li> <li>• Experience in product design, minimum 5 years.</li> <li>• Strong communication skills with the ability to manage their projects and present status to other parts of the business.</li> <li>• Strong use of Microsoft programs; Excel and PowerPoint especially.</li> <li>• Plastics design and process knowledge (including injection moulding).</li> </ul>	1 2. 3

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>Support Design cost calculations.</li> <li>Self-management of projects; including planning.</li> </ul>				
			Support development	<a href="https://www.reed.co.uk/jobs/research-technology-r-t-engineer/38647021?source=searchResults#/jobs/additive-manufacturing-jobs">https://www.reed.co.uk/jobs/research-technology-r-t-engineer/38647021?source=searchResults#/jobs/additive-manufacturing-jobs</a>	OP (Recruiter)	Slough, Berkshire, UK	R&T Engineer	<ul style="list-style-type: none"> <li>Entails conducting and managing R&amp;T projects to successful conclusion whilst utilising your technical expertise to assist engineering development and process optimisation across the business.</li> <li>Lead in the use and development of the organisations additive manufacturing process.</li> <li>identifying and monitoring new future technologies and initiatives.</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>Mechanical Engineer with knowledge of the aerospace industry.</li> <li>strong project management and design skills (preferably Catia V5).</li> </ul>	1 2. 4
			Support development	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MdG1MzUxOSA5?jvDi">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.1.1p5-build-1#/jv-details/MdG1MzUxOSA5?jvDi</a>	VACOA	France	R&D Engineer Additive Manufacturing  (3D metal printing machine)	<ul style="list-style-type: none"> <li>Check the consistency between functions and capabilities of the specification machines provided by the customer.</li> <li>Define and design the material and functional architecture of the product to develop.</li> <li>Realize the feasibility studies by realizing o piloting the tasks of design justifications.</li> <li>Conduct studies of static and dynamic operation and develop definitions.</li> </ul>		AM Coordinator  NDT Technician		1 2. 5

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				splayLanguage=fr			development for automotive, medical, aerospace, space and luxury sectors)	<ul style="list-style-type: none"> <li>• Support development, deployment and the technical documentation.</li> <li>• Support the validation service during the creation of test programs, tests and controls of different components.</li> <li>• Provide a technical assistant to the production units.</li> </ul>				
			Health and safety management	<a href="https://www.glassdoor.co.uk/job-listing/health-safety-officer-renishaw-JV_IC3414957_KO0,21_KE22,30.htm?jl=3337214304&amp;ctt=1567430588546">https://www.glassdoor.co.uk/job-listing/health-safety-officer-renishaw-JV_IC3414957_KO0,21_KE22,30.htm?jl=3337214304&amp;ctt=1567430588546</a>	Renishaw  (Additive Manufacturing Group_	Stone, UK.	Health and safety Officer	<ul style="list-style-type: none"> <li>• Ensure the safe operations of manufacturing, service and customer support activities within the division.</li> <li>• To author, maintain and own all relevant H&amp;S policies relating to AMG activities, ensure ongoing compliance with Renishaw policies and procedures.</li> <li>• To implement and carry out divisional audit plans, conducting any follow-up activities as required.</li> <li>• To undertake risk assessments and generate reports to local management and the Corporate H&amp;S team on a regular basis.</li> <li>• Provision of consistent and pragmatic advice to colleagues on all H&amp;S matters within the Group</li> </ul>			<ul style="list-style-type: none"> <li>• Hold a minimum diploma level in a relevant discipline.</li> <li>• Certified IOSH certificate or equivalent.</li> <li>• Have an engineering background preferably with experience of machine tool manufacture or maintenance or operation, or PLC programming or operation.</li> <li>• ATEX experience preferred.</li> <li>• Incident investigation</li> </ul>	1 2. 6

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>Support ad-hoc reviews and reporting including comprehensive H&amp;S information for divisional H&amp;S review meetings, as required by the business.</li> <li>Support for specific projects as required by the Group H&amp;S Manager.</li> <li>Support continuous improvement activities of the wider Health &amp; Safety function.</li> </ul>			experience would be beneficial.	
		Laboratory	Laboratory Manager	<a href="https://job-openings.monster.ie/laboratory-manager-dublin-dublin-ie-orion-group/211290475">https://job-openings.monster.ie/laboratory-manager-dublin-dublin-ie-orion-group/211290475</a>	Orion Group (Bio-printing technologies)	Dublin, Ireland	Laboratory Manager	<ul style="list-style-type: none"> <li>Providing leadership, setting expectations, and managing the relationships that assist with daily operations including administration of agreements and amendments.</li> <li>Supervising activities in the Bio-printing laboratory including managing and implementing systems for security, compliance, facilities, EH&amp;S, and maintenance of confidentiality.</li> <li>Management of client equipment, including scheduling, prioritization, access, use, maintenance and procurement including:</li> <li>Managing and escalating requests for facility and</li> </ul>	AM Supervisor		<ul style="list-style-type: none"> <li>BS/BA Science, Engineering or related degree.</li> <li>Look at link for more info.</li> </ul>	13.1

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
								<p>equipment updates including the management of maintenance and repairs in accordance with JJSI and partner policies.</p> <ul style="list-style-type: none"> <li>• Managing and escalating requests for laboratory access and new project introduction into the laboratory.</li> <li>• Perform budgetary planning, management, and reporting on the budget status.</li> <li>• Management of purchasing and raising PO's for commercially available materials and consumables including ensuring requisitions are verified and validated in advance of raising a PO against and on purchasing systems.</li> <li>• Ensuring user training and compliance in alignment with EH&amp;S policies.</li> <li>• Maintaining records and generating periodic reports related to operational status of the laboratory including: <ul style="list-style-type: none"> <li>• Laboratory capacity</li> <li>• Equipment usage</li> <li>• Number and status of active target projects</li> </ul> </li> </ul>				



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>Number and age of pending requests</li> </ul>				
			Laboratory manager-Technician	<a href="https://www.jobat.be/en/jobs/lab-manager-technician-leuven/job_1493947">https://www.jobat.be/en/jobs/lab-manager-technician-leuven/job_1493947</a>	Flanders Make	Leuven, Belgium.	Lab manager - Technician	<ul style="list-style-type: none"> <li>Lab coordination and maintenance.</li> <li>You organise the operations of the lab in cooperation with technicians, engineers and researchers; you select, for instance, the location of new prototype machines and ensure the safety of analysts, e.g. by constructing safety cages, you ensure the management and stock-taking of all equipment and materials, the calibration of measuring devices.</li> <li>You keep the lab in a proper operational state.</li> <li>You buy tools and measuring devices for the lab from the best suppliers based on price, quality and service and build strong business relationships with these suppliers.</li> </ul>		AM Supervisor	<ul style="list-style-type: none"> <li>Are an experienced technician.</li> <li>Have experience with servicing machines.</li> <li>Take initiative and focus on results.</li> <li>Combine good organisational skills with decisiveness.</li> </ul>	132
			Laboratory Engineer	<a href="https://www.glassdoor.co.uk/job-listing/lab-engineer-barclays-JV_IC3380">https://www.glassdoor.co.uk/job-listing/lab-engineer-barclays-JV_IC3380</a>	Barclays	Southampton, UK.	Lab Engineer	<ul style="list-style-type: none"> <li>Assisting the Eagle Lab Ecosystem Manager with the day to day operations of one or more Barclays Maker Spaces, including hosting and guiding visitors through the facilities.</li> <li>Maintaining and performing 1st line technical repairs to</li> </ul>		AM Supervisor	<ul style="list-style-type: none"> <li>Familiarity with equipment in makerspace environment such as laser cutters, 3d printers, CNC machines, vinyl cutter.</li> </ul>	133

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				757_KO0,12_KE13,21.htm?jl=3323978207&ctt=1567430638648				<p>technical equipment and workspaces (e.g. 3-D printers and laser cutters) - Coordinating and delivering local and regional digital fabrication events.</p> <ul style="list-style-type: none"> <li>• Staying ahead of the trends in digital fabrication and emerging and innovative technologies.</li> <li>• Identifying ways to promote your Eagle Lab externally, treating the lab as your own business and building your own brand as a fabrication expert within the local Ecosystem.</li> <li>• Promoting the Maker Movement to Eagle Lab visitors and creating advocates by developing and delivering innovative and creative induction sessions.</li> </ul>			<ul style="list-style-type: none"> <li>• A working knowledge of either Adobe, Coral Draw, Fusion 360.</li> <li>• An understanding of connected technology.</li> <li>• -Working Knowledge of basic electronics, AR/VR.</li> </ul>	
				<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KO0,11_IP4.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KO0,11_IP4.htm</a>	Coda Octopus Products  (www.codaoctopusgroup.com)	Edinburgh, UK.	Junior Technician/ Apprentice	<ul style="list-style-type: none"> <li>• Involve in electronic and electro-mechanical assembly, installation and configuration of software and firmware on various productions including testing and fault finding at board level and 3D printing of parts.</li> </ul>		NDT Technician		134

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
		Software and Firmware Technician	Machine Learning and Update	<a href="https://www.reed.co.uk/jobs/machine-learning-engineering-digital-manufacturing/38575151?utm_source=adzunacpc&amp;utm_medium=aggregator&amp;utm_term=engkdtest&amp;utm_campaign=it_telecoms&amp;utm_content=adz_2011-3">https://www.reed.co.uk/jobs/machine-learning-engineering-digital-manufacturing/38575151?utm_source=adzunacpc&amp;utm_medium=aggregator&amp;utm_term=engkdtest&amp;utm_campaign=it_telecoms&amp;utm_content=adz_2011-3</a>	The Digital Manufacturing Company  Reuben Sinclair (Agency)	London, UK.	Machine Learning Engineer	<ul style="list-style-type: none"> <li>• There is the opportunity (not requirement) to be client facing.</li> <li>• Design, optimise, and implement machine learning networks.</li> <li>• Write documentation to allow other developers to understand and utilise your models.</li> <li>• Keep up to date with cutting edge machine learning technique.</li> </ul>		Software Engineer	<ul style="list-style-type: none"> <li>• Advanced degree in Maths/Computer Science preferable.</li> <li>• Ideally be an expert in either Python, C++, C#.</li> <li>• Ideally you will have experience with deep learning, CNNs, machine vision or metrology.</li> <li>• have experience with packages like PyTorch, Scikit and TensorFlow.</li> </ul> <p>An inquisitive and analytical mind set, partnered with data profiling skills.</p>	14.1
		Technical Support Customer Service	Product Quality Control	<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KOO">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KOO</a>	Anderson Scott Solutions (Agency)	Telford, UK.	Technical Product Support	<ul style="list-style-type: none"> <li>• Respond to all customer concerns relating to quality of service and quality of products via all methods of communication.</li> <li>• Diagnose post sales quality issues by working cross-departmental, to research symptoms and root causes</li> </ul>			<ul style="list-style-type: none"> <li>• Experience in a customer facing role.</li> <li>• Confident verbal and written communication skills, across different levels of</li> </ul>	15.1

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				,11_IP3.htm	(SLA 3D Printing)			<p>associated with customer complaint, determining a course of action and communicate plan with internal teams and customer.</p> <ul style="list-style-type: none"> <li>• Support manufacturing in pre-shipment quality or process issues.</li> <li>• Promptly and accurately address technical questions including resin, mouldability and part design issues once trained.</li> <li>• Communicate customer issues by properly documenting in the CRM system.</li> <li>• Maintain department SLA responsiveness guidelines set on all customer (internal and external) issues.</li> </ul>			<p>business professionals.</p> <ul style="list-style-type: none"> <li>• Strong interpersonal skills, with an ability to build rapport and customer trust.</li> <li>• Ideally a good understanding of the general concept of the plastic injection moulding process would be beneficial.</li> <li>• Experience with 3D CAD modelling software, SolidWorks or equivalent is highly desired but not essential.</li> <li>• Worked with inspection measuring instruments. including callipers, micrometres and height gauges.</li> <li>• Background in Quality Control</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											inspection techniques and documentation methods would be beneficial. Experienced with MS Office products.	
		Technical Support and Customer Service	3D printer and equipment	<a href="https://www.3dnative.com/en/job/3d-printer-technician/">https://www.3dnative.com/en/job/3d-printer-technician/</a>  <a href="https://www.adzuna.co.uk/jobs/details/1245726192?se=XNWFRDbzQSen_1_qNtuS8Q&amp;v=D205CCEA6EA9533E92615FF2C0CEE84D5B0D2C4A">https://www.adzuna.co.uk/jobs/details/1245726192?se=XNWFRDbzQSen_1_qNtuS8Q&amp;v=D205CCEA6EA9533E92615FF2C0CEE84D5B0D2C4A</a>	CREAT3D	Reading, UK.	3D Printer Technician  (Technical support)	<ul style="list-style-type: none"> <li>• Provide Technical Support for the full range of 3D printers, equipment and services to CREAT3D customers.</li> <li>• Manage and respond directly to customer technical queries via phone, email and in-person.</li> <li>• Log and manage customer support queries in an accurate and timely manner using our electronic ticketing system, in line with performance targets</li> <li>• Identify, diagnose, research and resolve customers' technical problems and make timely and informed decisions to troubleshoot issues and solve customer technical queries</li> <li>• Attend customer premises for onsite service, repair, maintenance and upgrade requirements.</li> <li>• Become an extension of CREAT3D's product</li> </ul>		-	<ul style="list-style-type: none"> <li>• Minimum 12 months Technical Support experience essential.</li> <li>• 3D printer knowledge and experience are desirable but not essential.</li> <li>• CAD knowledge is desirable, but not essential.</li> </ul>	15.2

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>manufacturers technical teams, to obtain appropriate guidance and authorisation for repairs, replacement parts, warranty claims and technical updates.</p> <ul style="list-style-type: none"> <li>• Help to create clear and concise technical guides, instructions and replies in order to successfully resolve customer queries.</li> <li>• Assist in the creation of content for different marketing materials, newsletters, videos, etc by providing technical guidance where required.</li> <li>• Maintain the required level of product knowledge on our products to enable our customers to be successful. This will involve regular product training and knowledge refresher courses (online and in person in the UK and internationally)</li> <li>• Collect relevant technical information and regularly brief the team on any known issues or key product developments.</li> </ul>				
			Support Technician - Customer Service	<a href="https://i-amdigital.com/o">https://i-amdigital.com/o</a>	Ultimaker	NETHERLANDS	Support Technician	<ul style="list-style-type: none"> <li>• Review incoming issues and collect additional information to define the problem statement</li> </ul>			<ul style="list-style-type: none"> <li>• Secondary vocational education in a technical field</li> </ul>	15.3

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				opportunities/support-technician-customer-service			Customer Service	<ul style="list-style-type: none"> <li>Resolve incoming issues, escalate to the competence team in case no resolution is available</li> <li>Identify training needs of service partners</li> <li>Share knowledge with the service partners to increase their self-service level</li> <li>Keep our service partners up to date regarding the latest developments and technical knowledge</li> <li>Reproduce reported issues in our 3D print lab</li> <li>Continuously look for improvement opportunities</li> </ul>			<ul style="list-style-type: none"> <li>A customer-first attitude</li> <li>2-5 years' experience in a support function</li> <li>Great communication skills, fluent in English</li> <li>Good interpersonal skills; able to build relationships based on mutual trust</li> <li>Customer and service-oriented</li> <li>Experience in the 3D printing technology</li> </ul>	
			Product Expert - Software Customer Service	<a href="https://i-amdigital.com/opportunities/product-">https://i-amdigital.com/opportunities/product-</a>	Ultimaker	NETHERLANDS	Product Expert - Software Customer Service	<ul style="list-style-type: none"> <li>Continuously expand your knowledge about existing and new products</li> <li>Create technical documentation for training purposes</li> </ul>			<ul style="list-style-type: none"> <li>Bachelor's degree in a computer science</li> </ul>	15.4

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				expert- software - custome r-service				<p>and online publications</p> <ul style="list-style-type: none"> <li>• Provide training, through web-based sessions and occasional classroom training</li> <li>• Support the channel support team by providing resolutions for escalated issues</li> <li>• Closely cooperate with colleagues and R&amp;D to analyze and resolve complicated issues</li> <li>• Create good knowledge and understanding of customers' expectations regarding software functionality and performance</li> <li>• Represent the voice of the customer in software development teams</li> <li>• Continuously look for improvement opportunities</li> </ul>			<p>softwar e engine ering, or anothe r relevan t field</p> <ul style="list-style-type: none"> <li>• 2-5 years' experie nce in a technic al suppor t functio n</li> <li>• Eager to learn</li> <li>• Good docum entatio n skills, great commu nicatio n skills, fluent in English</li> </ul>	



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>Good interpersonal skills; collaborate, negotiate and interact on different levels in the organization</li> </ul> Service and customer-oriented	

			<p><a href="https://iamdigital.com/opportunities/medical-application-specialist-team-coordinator">https://iamdigital.com/opportunities/medical-application-specialist-team-coordinator</a></p>	Materialise	BELGIUM	Medical Application Specialist / Team Coordinator	<ul style="list-style-type: none"> <li>• As a Medical Application Specialist (70%)</li> <li>• You will work closely with the Account Manager in a pre-sales and post-sales role as a clinical and technical expert;</li> <li>• You will attend customer and prospect facing meetings with the Account Manager and in some cases alone. You will engage in the solution selling process by understanding the clinical and technical needs and gaps of the customer or prospect, and you will provide them with tailor-made demonstrations and justifications to showcase how our software can provide a solution matching their needs;</li> <li>• You will manage software evaluations and trial software licenses with prospective customers and manage the follow-up process to get feedback;</li> <li>• You will handle the day to day management of existing customers and offer a high standard of support in a timely manner;</li> <li>• You will offer support to existing customers and</li> </ul>		<ul style="list-style-type: none"> <li>• You possess a Master Degree in a technical discipline with medical focus such as Engineering (Biomedical, Mechanical), Biomedical Sciences, Life Sciences, Biology, or equivalent;</li> <li>• You have 3-5 years of experience as Application Specialist/Application Engineer</li> <li>• You have experience as a Functional Manager or as a coach to another team member</li> <li>• You are able to communicate with impact</li> <li>• You have a natural commercial feeling and you are</li> </ul>	155
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								<p>troubleshoot any problems they have via email, telephone and live web meetings;</p> <ul style="list-style-type: none"> <li>You will confidently deliver seminar presentations for prospective customers, and customer trainings;</li> <li>You will continuously look for upselling opportunities;</li> <li>Because of your expertise, you will also provide our Technical Product Management and Product Marketing teams with market input and feedback.</li> <li>As a Team Coordinator (30%)</li> <li>You coordinate the workload of your team members</li> <li>You define Onboarding plan for newcomers</li> <li>You define training plan tailored to each team member</li> <li>You follow-up on competence development activities together with Team Manager</li> <li>You are responsible for Resource Management</li> <li>You define Personal Development Plans for team members together with Team Manager</li> </ul>			<p>customer oriented</p> <ul style="list-style-type: none"> <li>You have experience working with Medical Devices or Medical Software</li> <li>You have knowledge about general anatomy;</li> <li>You have an understanding and appreciation of medical imaging and image processing;</li> <li>You have an understanding of the Hospital environment;</li> <li>You are interested in the medical world and in innovative technologies;</li> <li>You are well organized and team oriented;</li> <li>You are flexible and can easily</li> </ul>
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No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
			Customer and Markets Insight	<a href="https://i-amdigital.com/opportunities/graduate-3d-printing-customer-and-markets-insight">https://i-amdigital.com/opportunities/graduate-3d-printing-customer-and-markets-insight</a>	HP	Spain	Graduate 3D Printing Customer and Markets Insight	<ul style="list-style-type: none"> <li>Work with the 3D Printing Customer and Markets Insight Team in research projects</li> <li>Support the planning and implementation of projects to prepare information that helps our team and management in decision making</li> <li>Work with an interdisciplinary and international team in projects that will identify and describe the requirements of promising 3DP applications</li> <li>Support the definition of product and solution requirements with a very customer focus approach based on the inputs and insights of the rest of the team</li> <li>Lead projects to design and implements tools for</li> </ul>		Technological Development and Project Innovation	<ul style="list-style-type: none"> <li>A proactive person who is able to take decisions &amp; make recommendations</li> <li>Methodical and structure way to work</li> <li>Open person who can work in virtual and international teams</li> <li>A fast paced person with flexibility to work in parallel</li> </ul>	15.6

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>knowledge transfer within the 3D Organisation</p> <ul style="list-style-type: none"> <li>• Consolidate relevant information for the project in a structure way</li> <li>• Work out analyses and recommendations of the potential in different industries</li> <li>• Monitor the tools and models we define, check the criteria and assumptions and make appropriate adjustments</li> <li>• Support the team in daily tasks (ppt presentations, pivot tables, prospects interviews etc.)</li> </ul>			<p>in different projects</p> <ul style="list-style-type: none"> <li>• Fun to work with modern research and knowledge transfer tools and apps</li> <li>• Interest in platforms for knowledge analyses and knowledge sharing</li> <li>• Required Qualifications:</li> <li>• Bachelor degree in business administration</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											(Marketing, Consulting) <ul style="list-style-type: none"> <li>• Knowledge of tools and methodologies of market research</li> <li>• Very good in power point</li> <li>• Good written and verbal communication skills</li> <li>• Fluent English required</li> </ul>	
				<a href="https://alexanderdanielsglobal.zohorecruit.eu/re">https://alexanderdanielsglobal.zohorecruit.eu/re</a>	ALEXANDER DANIELS GLOBAL	GERMANY	Client application engineer	<ul style="list-style-type: none"> <li>• AD Global is currently working with a leading developer of professional desktop solutions who has an exciting new position available based in Stuttgart. The position is looking for an</li> </ul>			The position is looking for someone with the following experience:  - Hands on experience with	157

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				cruit/PortalDetail.na?iframe=true&digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWI.wQ-&jobid=9154000002018001&widgetid=915400000335057&embedsource=				experienced user of FDM/FFF printer technology to join the business with a focus on providing design and application support to a variety of industrial customers across Germany. The role will focus on client project development and will involve the set-up and operation of the company's printers to showcase its capabilities and suitability for industrial applications.			FDM/FFF printing solutions for industrial applications  - Experience with CAD software packages  - Experience dealing with customers with examples of problem solving  - A passion for learning and developing within a high growth company  - Ability to converse in business German	
		Benchmarking Initiatives	Benchmarking Initiatives	https://angel.co/company/authentise/jobs/540804-product-	Authentise	Munich, Germany.	Product Owner for AM Benchmarking Initiative	<ul style="list-style-type: none"> <li>Digital Benchmarking for Additive Manufacturing Operations.</li> <li>Talking to customers, understanding needs, designing and developing additional</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>Work collaboratively with a range of partners and stakeholders across the globe.</li> </ul>	16.1



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				owner-for-additive-manufacturing-benchmarking-initiative-intern	http://amperformance.net/			features, marketing, getting partners to market etc.				
		Service Engineer	AM Service Engineer	<a href="https://stelengebot.monster.de/service-techniker-digital-printing-m-w-d-markt-schwaben-bayern-de-lmh-engineering/209581650">https://stelengebot.monster.de/service-techniker-digital-printing-m-w-d-markt-schwaben-bayern-de-lmh-engineering/209581650</a>  sabrina.borke@lmh-engineering.com	LMH Engineering	Markt Schwaben, Bayern, Germany.	Service Technician Digital Printing	<ul style="list-style-type: none"> <li>Responsible for the careful and timely handling of all projects and tasks.</li> <li>Assist customers in technical matters and carry out installation, repairs, maintenance and training in the field.</li> <li>Transfer the product and process know-how from the customer visits to the internal departments and work closely together with the internal sales and distribution.</li> </ul>			<ul style="list-style-type: none"> <li>Successfully completed training as an electrical engineer or mechatronics engineer.</li> </ul>	17.1

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
			AM Service Engineer Quality control	<a href="https://www.linkedin.com/jobs/view/1345976349/">https://www.linkedin.com/jobs/view/1345976349/</a>	Renishaw	Stone, UK	AM Service Engineer	<ul style="list-style-type: none"> <li>• Installation and commissioning of AM systems.</li> <li>• Providing of training for customer AM machine operators.</li> <li>• Service and support for the Renishaw AM product line.</li> <li>• This will include maintenance of and upgrades to electro mechanical, and/or machine software and optical assemblies.</li> </ul>			<ul style="list-style-type: none"> <li>• Engineering background, preferably with experience in machinery service and maintenance.</li> <li>• HND qualified or equally relevant field service experience in similar role to the one being offered.</li> </ul>	17.2
				<a href="https://www.alexanderdanielsglobal.com/career-portal/">https://www.alexanderdanielsglobal.com/career-portal/</a>	Alexander Daniel Global (Recruiter)	Amsterdam, Netherlands	Field Service Engineer	<ul style="list-style-type: none"> <li>• Responsible for building and managing the team of field service engineers and expanding the support able to be offered to their clients.</li> <li>• Establishing a new European training centre in the Netherlands focused on both internal and external users</li> <li>• Providing training and support to the company's resellers across Europe.</li> <li>• Providing technical support to key accounts and ensuring customers are happy with the maintenance and repair service.</li> <li>• Building and leading the European field service engineering team.</li> </ul>			<ul style="list-style-type: none"> <li>• Hands-on service engineering background; installing and maintaining machines.</li> <li>• Experience in establishing or delivering training modules related to service, maintenance and repair.</li> <li>• A proven background in building and leading a service team supporting a variety of customers.</li> </ul>	17.3

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>Establishment and overseeing a customer service line for spares and repairs.</li> </ul>			<ul style="list-style-type: none"> <li>Technical background in manufacturing environment, working with industrial equipment.</li> <li>Experience with Additive manufacturing / 3D printing technology.</li> </ul>	
			Service and Support Engineer	<a href="https://i-amdigital.com/opportunities/service-and-support-engineer-zurich">https://i-amdigital.com/opportunities/service-and-support-engineer-zurich</a>	Additive Industries	SWITZERLAND	Service and Support Engineer	<ul style="list-style-type: none"> <li>Organize and execute successful installations at customer site resulting in final acceptance</li> <li>Provide general training to customers' operators and technicians</li> <li>Provide 1st line support of Additive Industries' products, remotely and when needed on site</li> <li>Execute condition monitoring, evaluate, diagnose and resolve problems to enable 24/7 production</li> <li>Provide support to customers with preventive and corrective maintenance</li> </ul>			<ul style="list-style-type: none"> <li>Education</li> <li>Bachelor's degree in Mechanical Engineering, Control - or Electrical Engineering, Software Engine</li> </ul>	17.4

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>• Install and monitor remote support tools and issue tracking processes</li> <li>• Willing to travel up to 50% of the time</li> <li>• Excellent social and communication skills</li> <li>• Commercial acumen</li> <li>• Stress resistant</li> <li>• Fluent in German as well as English.</li> </ul>			<ul style="list-style-type: none"> <li>• ering, Industrial Automation or similar.</li> <li>• Requirements</li> <li>• Minimum of 3 years of experience with high tech systems and specifically hands-on experience with installing and servicing</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>g high tech systems</li> <li>• Basic knowledge of control technology and electrical systems</li> <li>• Experience with providing remote service</li> <li>• Familiar with the terms FAT, SAT, design for testability,</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>assembly and service ability</li> <li>• Proven troubleshooting skills</li> <li>• Practical experience in providing training to end-users.</li> </ul>	
			Service and Technical Support Engineer	<a href="https://iamdigital.com/opportunities/service-manager-eemea-for-field-service-in-3d-printing-industry">https://iamdigital.com/opportunities/service-manager-eemea-for-field-service-in-3d-printing-industry</a>	EOS	GERMANY	Service Manager EEMEA for Field Service in 3D printing industry	<ul style="list-style-type: none"> <li>• In your role as Service Manager you are managing the group of Field Service Engineers, Technical Support Specialist, Hotline Specialist for our Region EEMEA (East Europa, Middle East and Africa) incl. Russia</li> <li>• You represent your unit externally and internally and you are the first point of contact for all Service related topics from/towards our customers.</li> </ul>			<ul style="list-style-type: none"> <li>• You are a proactive leader with a strong focus on solutions, and have a structured approach. You</li> </ul>	17.5

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<ul style="list-style-type: none"> <li>Customer centricity is our key driver! Show our customer orientation by carrying out regular visits to key customers, do business critical issue management, supporting manufacturing customers in regards to all their service requirements, define and develop customized solutions for them and feedback their requests into the service organization.</li> <li>You are responsible for resource and budget planning together with aligning and implementing the service strategy within the Region.</li> <li>Acting as the main interface with the customer for escalated service cases and being the main contact to the central service organization. You drive continuous improvement activities when it comes to the relevant Service processes in cooperation with the Headquarter and</li> </ul>			<p>have a high focus on quality and customer orientation as well as being able to transfer this into your team. Excellent communication and organizational skills are required for this position.</p>	

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								<p>internal and external SLAs and KPIs.</p> <ul style="list-style-type: none"> <li>Development and training is important for us! You will get intensive in-house-trainings on our systems, tools, technology and company culture but also plan trainings for your employees.</li> </ul>			<ul style="list-style-type: none"> <li>You should also have the following:</li> <li>Degree in engineering or economics or equivalent combination of education and experience</li> <li>Experience in a similar role including leading teams and in the</li> </ul>	



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											field of complex industrial equipment (production/ machines), preferable within Additive Manufacturing <ul style="list-style-type: none"> <li data-bbox="1868 954 1989 1335">• You are familiar with LEAN-Management, Six-Sigma, Kaizen and other process improv</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											<ul style="list-style-type: none"> <li>• Experience in managing conflicting priorities in a fast moving environment</li> <li>• Ability to match customers' requirements with companies' ability to deliver (Expectation)</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											Management) <ul style="list-style-type: none"> <li>• Strong analytical-, operational-, strategic and financial management skills</li> <li>• Very good command of spoken and written German and English, plus a willingness to travel</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				<a href="https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=915400001970030&amp;widgetid=915400000335057&amp;embedsource=">https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=915400001970030&amp;widgetid=915400000335057&amp;embedsource=</a>	Alexander Daniels Global	France	Service Technician in France - 3D Printing	<ul style="list-style-type: none"> <li>Installation, maintenance and service of metal 3D printer machines in France and surroundings.</li> <li>Independent planning, processing, documentation and analysis of service points.</li> <li>Documentation according to specifications</li> <li>Structured processing and feedback of insights gained from the customer support to the organisation</li> <li>Provide support for the customers - always with regard to the cost-benefit aspect</li> <li>Implementation of customer training courses</li> <li>Telephone support for customers and employees</li> <li>Onboarding and regular visits to the HQ in Germany</li> </ul>			<ul style="list-style-type: none"> <li>You are a certified technician or you have a comparable training such as mechatronics engineer, electrical engineer, mechanic.</li> <li>You have experience in conducting customer training courses and trainings.</li> <li>Have good IT and French &amp; English skills.</li> <li>You are willing to travel over 60% of your time.</li> </ul>	17.6
				<a href="https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=915400001970030&amp;widgetid=915400000335057&amp;embedsource=">https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWl.wQ-&amp;jobid=915400001970030&amp;widgetid=915400000335057&amp;embedsource=</a>	Alexander Daniels Global	Italy		<ul style="list-style-type: none"> <li>Installation, maintenance and service of 3D printer machines in Italy and surroundings.</li> </ul>			<ul style="list-style-type: none"> <li>Your are a certified technician or</li> </ul>	17.7

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				<a href="http://uit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWI.wQ-">uit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWI.wQ-</a> <a href="http://uit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMD0WMsenDKWI.wQ-&amp;jobid=915400001987140&amp;widgetid=915400000335057&amp;embedsource=">Q-&amp;jobid=915400001987140&amp;widgetid=915400000335057&amp;embedsource=</a>				<ul style="list-style-type: none"> <li>Independent planning, processing, documentation and analysis of service points.</li> <li>Documentation according to specifications</li> <li>Structured processing and feedback of insights gained from the customer support to the organisation</li> <li>Provide support for the customers - always with regard to the cost-benefit aspect</li> <li>Implementation of customer training courses</li> <li>Telephone support for customers and employees</li> <li>Onboarding and regular visits to the HQ in Germany</li> </ul>			<ul style="list-style-type: none"> <li>you have a comparable training such as mechatronics engineer, electrical engineer, mechanic.</li> <li>You have experience in conducting customer training courses and trainings.</li> <li>Have good IT and</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
											<p>English skills.</p> <ul style="list-style-type: none"> <li>You are willing to travel over 70% of your time.</li> </ul>	
		Software Engineer	3D Printing Software Products	<a href="https://www.alexanderdanielsglobal.com/career-portal/">https://www.alexanderdanielsglobal.com/career-portal/</a>	Alexander Daniel Global (Recruiter)	Berlin, Germany	Software Product Manager – 3D Printing	<ul style="list-style-type: none"> <li>Direct product responsibility for software products in additive manufacturing.</li> <li>You are the central contact person for sales, marketing and R&amp;D.</li> <li>You observe the market; you analyse the customer problems and benefits.</li> <li>Define and coordinate the requirements with R&amp;D for the development of software and process monitoring products.</li> <li>Participate in the expansion and in the ongoing updating of the integrated software and in the process monitoring product strategy.</li> <li>Create the product roadmap.</li> <li>Support sales and technical service also through occasional</li> </ul>			<ul style="list-style-type: none"> <li>Studies in IT software development.</li> <li>Professional experience in the development, product management, sales or marketing of software and/or process monitoring products for industrial applications.</li> <li>Knowledge of powder bed laser melting processes.</li> </ul>	18.1

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								customer visits and business meetings. <ul style="list-style-type: none"> <li>• Prepare technical content for use in sales and marketing communication.</li> <li>• Support the products throughout their life-cycle and communicate with the relevant departments.</li> </ul>				
			3D Printing Software for quality control	<a href="https://www.indeed.co.uk/3d-Printing-jobs?advn=2771161945507083&amp;vjk=ce0a17c17fdb5e5c2">https://www.indeed.co.uk/3d-Printing-jobs?advn=2771161945507083&amp;vjk=ce0a17c17fdb5e5c2</a>	Taraz Metrology Ltd	Notttingham, UK.	Software Engineer	<ul style="list-style-type: none"> <li>• Develop quality control, manufacturing and inspection systems for next-generation digital factories.</li> </ul>				18.2
			3D Printing Software	<a href="https://www.glassdoor.co.uk/job-listing/software-engineer-grabcad-JV_IC2662516_KO0,17_KE18,25.htm?jl=3219041382">https://www.glassdoor.co.uk/job-listing/software-engineer-grabcad-JV_IC2662516_KO0,17_KE18,25.htm?jl=3219041382</a>	GrabCAD Stratasys	Cambridge, UK.	Software Engineer  (Coding for 3D Printing)	<ul style="list-style-type: none"> <li>• Developing code to enable engineers to print in 3D, intelligently.</li> </ul>			<ul style="list-style-type: none"> <li>• BSc or BA in Computer Science, Software Engineering, Maths, or a related discipline.</li> <li>• Ability to work in a team.</li> <li>• Ability to write testable, resilient, documented code with effective unit</li> </ul>	18.3

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				<a href="https://www.glassdoor.co.uk/job-listing/software-engineer-cambridge-united-kingdom-grabcad-JV_IC2662516_KO0,42_KE43,50.htm?jl=3218907433&amp;ctt=1567424380335">https://www.glassdoor.co.uk/job-listing/software-engineer-cambridge-united-kingdom-grabcad-JV_IC2662516_KO0,42_KE43,50.htm?jl=3218907433&amp;ctt=1567424380335</a>							<ul style="list-style-type: none"> <li>and integration tests.</li> <li>• Experience in CAD programming, geometric modelling, graphics programming, games programming, computational geometry, simulation or similar.</li> <li>• Experience with modern software development methodologies and tools. Any or all of the following languages: C++, C#, JavaScript, TypeScript.</li> </ul>	
			Web Platform/ Server Technology	<a href="https://angel.co/company/ai-build/jobs/354461-full-stack-">https://angel.co/company/ai-build/jobs/354461-full-stack-</a>	Ai Build (Artificial Intelligence and Advanced Additive Manufacturing)	London, UK.	Full-stack Software Engineer  Software Engineer	<ul style="list-style-type: none"> <li>• Work closely with the CEO and VP Software Engineering to aid development of the web platform.</li> <li>• Contribute to the technical direction of the software team.</li> </ul>			<ul style="list-style-type: none"> <li>• Strong grasp of at least one JVM language (e.g. Java, Kotlin, Scala...).</li> <li>• Experience with React and, ideally,</li> </ul>	18.4



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				software-engineer  <a href="https://angel.co/company/ai-build/jobs/520679-software-engineer">https://angel.co/company/ai-build/jobs/520679-software-engineer</a>	technologies)						<p>Redux. We may consider candidates who don't have experience with React or Redux if they have significant experience in other relevant areas (e.g. another Javascript UI framework)</p> <ul style="list-style-type: none"> <li>• Experience with modern software engineering practices. Source control, unit &amp; integration testing and code review are fundamental parts of the software development process at Ai Build.</li> </ul> <p>We utilise ThreeJS alongside React for the 3D aspects of our UI. Experience with this isn't required</p>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
											but some basic knowledge of geometry and/or 3D engines is desirable.	
			Web Platform/ Server Technology	<a href="https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KOO,11_IP4.htm">https://www.glassdoor.co.uk/Job/3d-printing-jobs-SRCH_KOO,11_IP4.htm</a>	Airbus  Airbus Defence and Space Limited	Stevenage, UK,	Internship in the field of network and server technology	<ul style="list-style-type: none"> <li>As part of the Engineering Solutions team in IT, you are responsible for supporting the process improvement activities within the group and the Digitalisation Program, in particular the platform development for 3D printing. Our solutions act as a digital bridge between the parties who have a need for 3D printing and online service providers distributed around the world across the Airbus group. You are highly technical and comfortable with both client-side and server-side programming in a web environment and have a design eye for detail on the user interface. You partner with various peers' teams including security, networks, and infrastructure as well as other key stakeholders of our products around the world. You troubleshoot, respond to</li> </ul>			<ul style="list-style-type: none"> <li>Experience of working in a technical project environment.</li> <li>Understanding of LAN/WAN networks.</li> <li>- Microsoft .NET C#</li> <li>- Microsoft SQL Server</li> <li>- SQL and T-SQL</li> <li>- JavaScript</li> <li>- HTML &amp; CSS</li> <li>Desirable: <ul style="list-style-type: none"> <li>- Telerik Libraries</li> <li>- Bootstrap CSS Library</li> <li>- Three.js Library</li> <li>- API experience</li> <li>- Image processing</li> </ul> </li> </ul>	18.5

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>enquiries and find solutions to technical challenges including software testing. Beyond the day-to-day, you lead or participate in key engineering projects and contribute to the documentation efforts.</p> <ul style="list-style-type: none"> <li>• Engage in and improve the whole lifecycle of services from inception and design, through deployment, operation and refinement.</li> <li>• Lead web development projects through system design, developing code and frameworks, capacity planning and launch reviews.</li> <li>• Debug and optimize code and automate routine tasks.</li> <li>• Maintain services once they are live by measuring and monitoring availability, latency and overall system health.</li> <li>• Scale systems sustainably through mechanisms like automation and evolve systems by pushing for changes that improve reliability and velocity.</li> <li>• Lead infrastructure and software projects and coordinate the necessary technical deliveries in</li> </ul>			<p>- Web 3D rendering experience</p> <ul style="list-style-type: none"> <li>• Strong customer service, organizational, prioritization, multitasking, communication, and leadership skills.</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>partnership with peer teams in IT.</p> <ul style="list-style-type: none"> <li>• Manage server-side infrastructure running on both physical and virtual resources.</li> <li>• Maintain systems to current IT security standards.</li> </ul>				
				<a href="https://i-amdigital.com/opportunities/3d-printing-software-platform-and-applications-architecture">https://i-amdigital.com/opportunities/3d-printing-software-platform-and-applications-architecture</a>	HP	Spain	3D Printing Software Platform and Applications - Application Architect	<ul style="list-style-type: none"> <li>• Develop end-to-end application architecture for 3D printing business applications by working across multiple business functions to define future state and gain consensus</li> <li>• Own the application architecture strategy, planning, and delivery perspective for responsible initiatives and programs</li> <li>• Understand the enterprise IT business systems, integration points and identify the right tool sets that's most suited for current</li> </ul>			<ul style="list-style-type: none"> <li>• 10 years of demonstrable experience leading and crafting complex Integration projects with business applications</li> <li>• 5+ years of proven experience in IT development, architecture and business application development in complex environments</li> <li>• Experience implementing complex</li> </ul>	18.6

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>application footprint and future</p> <ul style="list-style-type: none"> <li>• Design and build solutions that increase business value using industry standard methodologies and scalable integration tools/platforms</li> <li>• Facilitate the evaluation and selection of tools and technologies to improve existing integration platform</li> <li>• Guide implementation/delivery team to ensure standard methodologies are communicated and practiced</li> <li>• Plan, coordinate, architect, and supervise all activities related to the integration of applications, and third-party solutions as required to meet the business</li> </ul>			<ul style="list-style-type: none"> <li>• business applications or developing efficient effective solutions to diverse and complex business problems</li> <li>• Define and implement best practices for integrations with standard enterprise systems such as ERP and CRM</li> <li>• Information technology (IT) experience implementing complex IT applications or developing efficient effective solutions to diverse and complex</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								requirements of the organization			business problems <ul style="list-style-type: none"> <li>• Practical experience delivering end-to-end solution architectures</li> <li>• Must be organized, flexible &amp; able to act independently, with ability to switch rapidly between different projects and priorities in a fast-paced environment</li> <li>• Adept at collaborating within a matrixed environment</li> <li>• Superior verbal and written communication skills, including</li> </ul>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
											written, public speaking, and small-group presentation skills, including ability to communicate effectively with core team, extended stakeholders and leadership	
				<a href="https://i-amdigital.com/opportunities/security-and-privacy-manager">https://i-amdigital.com/opportunities/security-and-privacy-manager</a>	Ultimaker	NETHERLANDS	Security and Privacy Manager	<p>Be a leader in creating security and privacy awareness within Ultimaker</p> <p>Build a strategic and comprehensive information privacy and security program; ensure information privacy and security policies, standards, and procedures are up to date</p> <p>Ensure disaster recovery, business continuity, risk management, and access controls are addressed</p> <p>Perform data privacy impact assessments, data breach response, and report to relevant authorities on same as appropriate</p>			<p>You have a bachelor's or master's degree</p> <p>Broad knowledge of European data protection laws, including GDPR and ePrivacy directives</p> <p>You hold relevant security certificates such as CISM, CISA, and CIPP/E</p> <p>Certification, and are aware of GDPR and ISO 27001/NEN7510</p> <p>Knowledge of master data management</p>	18.7

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
								<p>Monitor and regularly audit compliance with European data protection laws, including GDPR and the ePrivacy directive</p> <p>Report regularly to senior management regarding status of security and GDPR compliance</p> <ul style="list-style-type: none"> <li>• Inform and advise appropriate personnel about their obligations in the handling and processing of personal data under GDPR and other applicable data protection provisions</li> </ul>			<p>Affinity with IT, IoT, legal and internal controls</p> <p>Experience within a mid-sized (500-1000 FTE) complex and international organization</p> <ul style="list-style-type: none"> <li>• Good communication skills and an excellent command of the English language.</li> </ul>	
								•			•	
		Technological Development and Project Innovation	Technological development	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTlyODgtMTMONzMxN">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/MTlyODgtMTMONzMxN</a>	GKN Sinter Metals Engineering GmbH  Mr. Haschemi Nia (HR) Haschemi.nia@gknpm.com	Radevormwald, Germany.	Technology Manager Binder Jetting	<ul style="list-style-type: none"> <li>• Developing technological unique selling points for GKN in Additive Manufacturing</li> <li>• <b>Head of Binder Jetting Technology Teams.</b></li> <li>• Develop and industrialize HP Metal Printing Technology for series production.</li> <li>• Project management along the AM value chain.</li> <li>• qualification of new materials</li> <li>• Process development Printing of green parts</li> </ul>			<ul style="list-style-type: none"> <li>• Master or postgraduate degree in materials science,</li> <li>• Mechanical engineering or similar disciplines.</li> <li>• 5 years Professional experience + development skills.</li> <li>• Familiar with Test and validation</li> </ul>	19.1



No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlap Role	Job Requirements (Skills)	Ref No.
				TE4NC1TIDE?jvDisplayLanguage=de				<ul style="list-style-type: none"> <li>Development of suitable Sintering processes</li> <li>Participate in the specification, release and procurement of new equipment.</li> </ul>			<ul style="list-style-type: none"> <li>methods as well as methods for materials and materials.</li> <li>Product Development.</li> <li>Strength in communication and team spirit.</li> <li>coupled with an enthusiasm to high standards for our customers.</li> <li>experience in powder metallurgy, Additive Manufacturing and metal sintering.</li> </ul>	
			AM Projects Innovation	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OD">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OD</a>	AMEXCI AB  recruitment@amexci.com	Sweden	AM Innovation Specialist	<ul style="list-style-type: none"> <li>Project management along the AM value chain</li> <li>Project management along the AM value chain.</li> <li>supports our cross-functional team in further driving forward the knowledge and the AM adoption within our customer base.</li> <li>conduct customer workshops and projects.</li> </ul>		AM Coordinator	<ul style="list-style-type: none"> <li>-Engineering background or good understanding of technical issues.</li> <li>Experience in (Additive) manufacturing technology is desirable</li> </ul>	19.2

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				I4Nzc1IDEyMQ?jvDisplayLanguage=sv				<ul style="list-style-type: none"> <li>Develop new training concepts and teaching materials in the areas of AM technology, design, software and business.</li> <li>Actively engage with customers to identify new potential projects.</li> </ul>				
			AM Projects Innovation	<a href="https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OGESNGJjNzgtYjM2Mi00Yjk1LWl1MjctNDEwODNiZTI1ZjU0IDM?jvDisplayLanguage=nl">https://ec.europa.eu/eures/eures-searchengine/page/main?lang=en&amp;app=4.3.1p1a-build-0#/jv-details/OGESNGJjNzgtYjM2Mi00Yjk1LWl1MjctNDEwODNiZTI1ZjU0IDM?jvDisplayLanguage=nl</a>	ENGIE Fabricom	Belgium	Innovation Engineer	<ul style="list-style-type: none"> <li>Set up and help realize innovation projects</li> <li>assisting the operational divisions with innovation projects driving drones (drone pilot)</li> <li>testing and analysing innovative technology.</li> </ul>				19.3
				<a href="https://i-amdigital.com/opportunities/new-">https://i-amdigital.com/opportunities/new-</a>	HP	SPAIN	New Product Supply Chain	<ul style="list-style-type: none"> <li>Closely working with R&amp;D, NPI Supply Chain groups and Manufacturing</li> </ul>			Bachelor's or Master's degree in Business Management, Economics,	19.4

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				product-supply-chain-lead-3d-printing			Lead 3D Printing	<p>Partners (MPa's), drive the definition and development of the inbound supply chain for production of new products.</p> <ul style="list-style-type: none"> <li>• Since earliest phases of new products design and closely working with HP CDPS (Central Direct Procurement Services), provide DFX feedback and guidance to RnD for best product cost, sustainable and efficient manufacturability and long term assurance of supply.</li> <li>• Lead cost reduction activities required to achieve product cost goals pre and post Intro.</li> <li>• Coordinate assurance of supply for the prototype builds along the development phase.</li> <li>• Drive the convergence of manufacturing</li> </ul>			<p>Engineering or Computer Sciences.</p> <p>3 or more years of experience as Supply Chain Program Lead, Procurement Engineer, Strategic Vendor Management, Supply Chain. Industrialization Consultant or applicable work experiences.</p> <p>Experience in Procurement of ME/EE technologies and in New Product Development with MPa's.</p> <p>Strong leadership and project management skills.</p> <p>Good in negotiation and influencing. Able to persuade others</p>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>processes and quality control plans at vendors to ensure parts can be manufactured efficiently and with quality since day 1 of mass production.</p> <ul style="list-style-type: none"> <li>• Ensure enough capacity and flexibility at vendors to meet production plans as well as consumables, service and accessories needs.</li> <li>• Manage Program Tooling Budget required to setup the Supply Chain.</li> <li>• Define, implement and sustain the processes and IT tools required for NPI.</li> <li>• Lead and/or support key Business initiatives to ensure most efficient Inbound Supply Chain and best Portfolio Cost Structure (Tactical Plan Business Cost Reductions, Cost</li> </ul>			<p>and reach mutual agreements.</p> <p>Able to work collaboratively with teams from other disciplines, cultures and worldwide organizations.</p> <p>Team builder. Collaborative. Able to build rapport with partners.</p> <p>Excellent in communication and presentation. Fluent spoken and written English.</p> <p>Proactive, self-motivated and positive.</p>	

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
								<p>Roadmaps &amp; Benchmarking, ...).</p> <ul style="list-style-type: none"> <li>Provide guidance and mentoring to less-experienced SC team members. Foster knowledge sharing inter-team and ensure consistency and synergies of NPI processes and tools across LFP and 3D businesses.</li> </ul>				
				<a href="https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMDOWMs enDKWl.wQ-&amp;jobid=915400001790208&amp;widgetid=91">https://alexanderdanielsglobal.zohorecruit.eu/recruit/PortalDetail.na?iframe=true&amp;digest=ChJoUEgD.oWQNB29dycY20d7UZskMDOWMs enDKWl.wQ-&amp;jobid=915400001790208&amp;widgetid=91</a>	Alexander Daniels Global	Belgium	Senior Quality Analyst	<ul style="list-style-type: none"> <li>Observe, analyse and forecast research and development information of the 3D Printing processes.</li> <li>Provide input or suggest improvements to the products and the solutions they offer</li> <li>Data reporting to management</li> <li>Initiate quality improvement projects</li> <li>Monitor the production and the quality of the product</li> </ul>		AM Process Engineer	<ul style="list-style-type: none"> <li>Extensive experience in a product design environment with focus on quality and reliability</li> <li>Experience in setting up and managing quality improvement programs</li> <li>Transform data into meaningful information, create reports with visuals</li> </ul>	19.5

No.	Name of Professional Profile	(Suggested Professional Profile)	Area of Specialism	Website (Link)	Recruiter/ Company Name	Country	Listed Title	Job descriptions	Tasks not listed in the description	Overlapping Role	Job Requirements (Skills)	Ref No.
				54000000335057&embedsource=							<ul style="list-style-type: none"> <li>• Data management knowledge</li> <li>• SQL, data mining, R, Power BI, Excel, Python</li> <li>• Good knowledge of physics, optics and software to support the ability to truly understand the production-process and the end-product.</li> <li>• Previous 3D printing experience is a plus</li> <li>• Fluent in English language</li> </ul>	
								•				

Table 14: Other types of AM Professional Profiles.

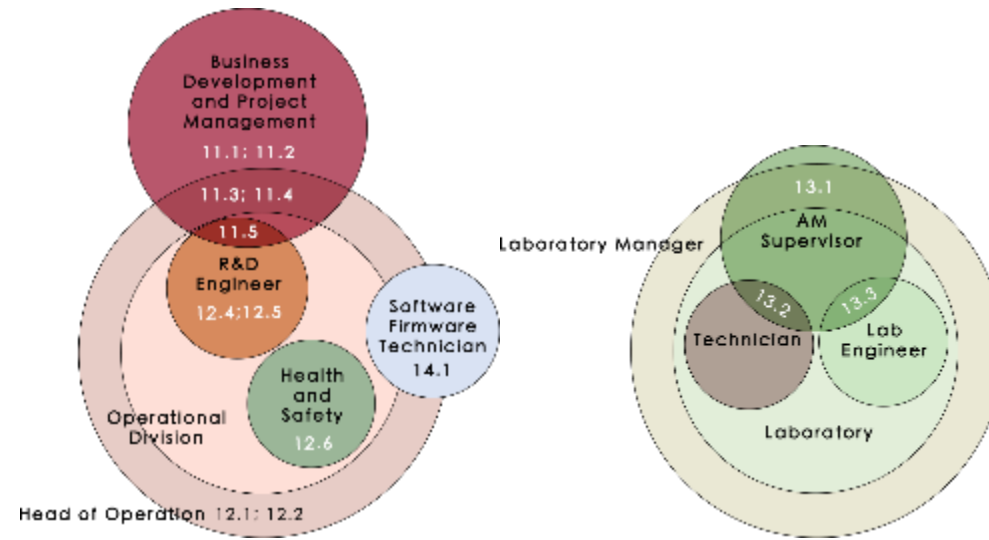


Figure 6: AM Professional Profiles Ref No. Group 11,12,13,14.

## 11. Appendix 3: Currently Available AM Training Courses

Title	Institution	Country	EQF level	Type of programme
Additive Manufacturing Module - PM life	EPMA	DE	4	<a href="#">Short Courses</a>
EuroAM Seminar	EPMA	SE	4	<a href="#">Short Courses</a>
Additive Manufacturing	PM Life	DE	4	<a href="#">Short Courses</a>
Design for Metal Additive Manufacturing	Wilde Analysis Ltd	UK	4	<a href="#">Short Courses</a>
Advanced Introduction to Additive Manufacturing	The Manufacturing Technology Centre: MTC	UK	4	<a href="#">Short Courses</a>
Introduction to additive manufacturing	3T Additive Manufacturing Ltd	UK	4	<a href="#">Short Courses</a>
Fundamentals of 3D Digital Design and Additive Manufacturing (3D Printing), Short Course	UCAM - Catholic University of Murcia	ES	4	<a href="#">Short Courses</a>
Metallurgy for Additive Manufacturing	Institution of Mechanical Engineers	UK	4	<a href="#">Short Courses</a>
Design for Additive Manufacturing	TMG Muenchen	DE	4	<a href="#">Short Courses</a>
An introduction to additive manufacturing	OGV Inspire	UK	4	<a href="#">Short Courses</a>
Design for Additive Manufacturing	Tri-Tech 3D Ltd	UK	4	<a href="#">Short Courses</a>
Certified industrial technician (IHK) - specialization in additive manufacturing	SKZ	DE	4	<a href="#">Short Courses</a>
Introduction to Additive Manufacturing Training Course	Cadspec	UK	4	<a href="#">Short Courses</a>
Training course: Additive manufacturing design essentials	Renishaw	UK	4	<a href="#">Short Courses</a>
Additive Manufacturing	EPMA	DE	4	<a href="#">Short Courses</a>
Masterclass in Metal 3D Printing	Materialise	BE	4	<a href="#">Short Courses</a>
3D PRINTING ACADEMY	Stratasys Academy	UK	4	<a href="#">Short Courses</a>
Introduction to 3D Printing	University of Hertfordshire	UK	4	<a href="#">Short Courses</a>
Clay 3D Printing, Short Course	Estonian Academy of Arts	EE	4	<a href="#">Short Courses</a>
3D Scanning and Printing, Certificate	Technische Universität Berlin	DE	4	<a href="#">Short Courses</a>
3D Printing/Rapid Prototyping (short course)	London Metropolitan University	UK	4	<a href="#">Short Courses</a>
TAKE SHAPE: 3D PRINTING WORKSHOP	General Assembly	UK	4	<a href="#">Short Courses</a>
3D Printing Courses	London Software Training	UK	4	<a href="#">Short Courses</a>
3D Printing Courses in South Wales	Computer Training Wales	UK	4	<a href="#">Short Courses</a>
3D Printing for Model Making	Nottingham Trent University	UK	4	<a href="#">Short Courses</a>
Intro to Additive Manufacturing	3D Print Academy	UK	4	<a href="#">Short Courses</a>
3D printing courses London	City Lit - Adult Education	UK	4	<a href="#">Short Courses</a>
IQS Summer Program on Rapid Prototyping and Additive Manufacturing	IQS – Universitat Ramon Llull	ES	4	<a href="#">Short Courses</a>
3D Scanning and Printing	Technische Universität Berlin	DE	4	<a href="#">Short Courses</a>
CU 00 - AM processes overview	ISQ	PT	5	<a href="#">Short Courses</a>



Title	Institution	Country	EQF level	Type of programme
Additive manufacturing: Quality requirements and component properties	LZH Laser Akademie GmbH	DE	5 and 6	Workshop
Additive manufacturing: Opportunities for SMEs	LZH Laser Akademie GmbH	DE	5 and 6	Workshop
Additive manufacturing: Production-oriented design (metal)	LZH Laser Akademie GmbH	DE	5 and 6	Workshop
Additive manufacturing: Production-oriented design (plastics)	LZH Laser Akademie GmbH	DE	5 and 6	Workshop
Additive manufacturing: Opportunities for medium-sized companies	LZH Laser Akademie GmbH	DE	5 and 6	Workshop
ADDITIVE MANUFACTURING COURSE (5 ECTS course of master degree programme)	Politecnico di Milano	ITA	6	<a href="#">Master Degree</a>
ADDITIVE MANUFACTURING FOR SPACE AND AEROSPACE APPLICATIONS (6 ECTS course of master degree programme)	Politecnico di Milano	ITA	6	<a href="#">Master Degree</a>
Specialist for additive manufacturing processes - Metal	LZH Laser Akademie GmbH	DE	6	<a href="#">Seminar</a>
Further training for teachers at vocational schools: Additive manufacturing with laser beam - Metal	LZH Laser Akademie GmbH	DE	6	<a href="#">Seminar</a>
Máster Thesis: Development of a Business Model for the Development of Heat Exchangers by Means of Selective Laser Melting (SLM)	Mondragon University	ES	6	<a href="#">Undergraduate level</a>
ADDITIVE MANUFACTURING SHORT COURSE	MIP-Politecnico di Milano	ITA	7	<a href="#">Short Courses</a>
Metal Additive Manufacturing	Cranfield University	UK	7	<a href="#">Post graduate level</a>
Additive Manufacturing and Advanced Manufacturing Technologies	The University of Sheffield	UK	7	<a href="#">Post graduate level</a>
Additive Manufacturing	University of Central Lancashire	UK	7	<a href="#">Post graduate level</a>
Additive Manufacturing	Anglia Ruskin University	UK	7	<a href="#">Post graduate level</a>
Advanced Materials and Additive Manufacturing	University of Derby	UK	7	<a href="#">Post graduate level</a>
Additive Manufacturing and 3D Printing	University of Nottingham	UK	7	<a href="#">Post graduate level</a>
Additive Layer Manufacturing Technologies	University of Wolverhampton	UK	7	<a href="#">Post graduate level</a>
aster's Programme in Additive Manufacturing	Uppsala University	SE	7	<a href="#">Post graduate level</a>
MASTER IN 3D PRINTING AND ADVANCED MANUFACTURING	EDDM Training & EDDM Solutions	ES	7	<a href="#">Post graduate level</a>
ADDITIVE MANUFACTURING FOR SPACE AND AEROSPACE APPLICATIONS (6 ECTS)	Politecnico di Milano	ITA	8	<a href="#">PHD level</a>
3 year PhD Studentship in Enabling Next Generation Additive Manufacturing- Additive Manufacturing (3D Printing) of multi-materials using novel drop on demand "Metal Jetting"	University of Nottingham	UK	8	<a href="#">PHD level</a>
Additive Manufacturing PhD Opportunity: Inkjet printing of non-solvent polyimide materials.	University of Nottingham	UK	8	<a href="#">PHD level</a>

Title	Institution	Country	EQF level	Type of programme
3 year PhD Studentship in Enabling Next Generation Additive Manufacturing- Additive manufacturing of photon sensors based on hybrid low dimensional 0D/2D heterostructures	University of Nottingham	UK	8	<a href="#">PHD level</a>
3 year PhD Studentship in Enabling Next Generation Additive Manufacturing - Additive Manufacturing of Opto-Electronic Devices using Novel High Performing Polymer Inks	University of Nottingham	UK	8	<a href="#">PHD level</a>
3 year PhD Studentship in Enabling Next Generation Additive Manufacturing - Additive Manufacturing (3D Printing) of Multi-functional Scaffold and Tissue Models through Multi-material Projection Micro Stereolithography (pμSLA)	University of Nottingham	UK	8	<a href="#">PHD level</a>
3 year PhD Studentship in Enabling Next Generation Additive Manufacturing- Additive Manufacture of Bacterial Biofilm Resistant Surfaces using Novel High Performing Polymer “Inks”	University of Nottingham	UK	8	<a href="#">PHD level</a>
PhD Studentship: Temporal Design for the Additive Manufacturing of Medical Devices	University of Birmingham	UK	8	<a href="#">PHD level</a>
Nanocomposites for Additive Manufacturing, Material Science and Engineering – PhD (Funded) Ref: 3809	University of Exeter	UK	8	<a href="#">PHD level</a>
PhD Studentship - Additively Manufactured Morphing Components for Aeroelastic Applications	University of Bath	UK	8	<a href="#">PHD level</a>
NSIRC 175 PhD Studentship – Prediction of fatigue limit of additive manufactured materials	National Structural Integrity Research Centre	UK	8	<a href="#">PHD level</a>
Computational Fabrication for Reproduction of Appearance and Tactile Properties of 3D Printed Objects	University of Lugano	CH	8	<a href="#">PHD level</a>
PhD Position –Chemistry and Chemical Engineering – New chemical approaches to volumetric 3D Printing	University of Freiburg	DE	8	<a href="#">PHD level</a>
Advanced Computer Aided Design Modelling – Developing Intelligent Surfaces and Textures from 4D Printing	Brunel University London	UK	8	<a href="#">PHD level</a>
Principles of Design for 4D Printing (Df4DP)	Brunel University London	UK	8	<a href="#">PHD level</a>
Optimising Mechanical Performance of Additively Manufactured (3D Printed) Titanium Alloys	University of Aberdeen	UK	8	<a href="#">PHD level</a>
3D printing of drug delivery implants	Queen’s University Belfast	UK	8	<a href="#">PHD level</a>
3D printed polymer nanocomposites	Queen’s University Belfast	UK	8	<a href="#">PHD level</a>
Additive manufacturing biodiesel production nanocatalysts	University of Bradford	UK	8	<a href="#">PHD level</a>
Process and material design and enhancement for the additive manufacturing and 3D printing of the wax materials	Loughborough University	UK	8	<a href="#">PHD level</a>

Title	Institution	Country	EQF level	Type of programme
Design and Manufacture of Broadband 3D Multilayer Metamaterials for Microwave and mm-wave Application	University of Exeter	UK	8	<a href="#">PHD level</a>
Microstructure control in metal additive manufacturing	The University of Manchester	UK	8	<a href="#">PHD level</a>
Shape optimisation for aesthetics/functional requirements in the context of additive manufacturing	Kingston University	UK	8	<a href="#">PHD level</a>
Microstructure and defect formation in metal additive manufacturing	The University of Manchester	UK	8	<a href="#">PHD level</a>
Development of New Design and Manufacturing Strategy for Additive Manufacturing 3D Metal Printing	University of Portsmouth	UK	8	<a href="#">PHD level</a>
Developing a Computer Aided Design Interface for Multi-Material Additive Manufacturing (3D Printing)	Brunel University London	UK	8	<a href="#">PHD level</a>
Full funded PhD Studentship in Multiscale modelling for Materials Design in Additive Manufacturing	Lancaster University	UK	8	<a href="#">PHD level</a>
Development of an inhalable anti-tubercular therapies to include pre-clinical screening and 3D printing/additive manufacturing	Royal College of Surgeons in Ireland	IE	8	<a href="#">PHD level</a>
Shape Memory Materials for Additive Manufacturing	Brunel University London	UK	8	<a href="#">PHD level</a>
PhD course: 3D printing for biomedical materials (3hp)	Uppsala University	SE	8	<a href="#">PHD level</a>
3D PRINTING OF STRONG FIBER REINFORCED POLYMERS (3DPSTRONG)	Universitat de Girona	ES	8	<a href="#">PHD level</a>
PDEng trainee Topology optimization of 3D printed concrete bridges	Eindhoven University of Technology	NL	8	<a href="#">PHD level</a>
PhD Position in the field of 3D printing of Fe-based shape memory alloys (SMA) for novel structural metamaterials and "smart" structures	Swiss Federal Laboratories for Materials Science and Technology	CH	8	<a href="#">PHD level</a>
PhD Position in Concrete Processing for 3D Printing	ETH Zurich	CH	8	<a href="#">PHD level</a>
Additive Manufacturing of Functionally Graded Structures	Ulster University	UK	8	<a href="#">PHD level</a>
PhD position in SLM process optimization for nickel base alloys of difficult processability	University of the Basque Country - Lortek	ES	8	<a href="#">PHD level</a>
Powder metallurgy Summer School	EPMA	IT	N.A	<a href="#">Summer School</a>
INTRODUCTION TO ADDITIVE MANUFACTURING	IDONIAL	ES	N.A	<a href="#">Short Courses</a>
Additive manufacturing. Industry training	IDONIAL	ES	N.A	<a href="#">Short Courses</a>
3D Printing and Biofabrication	Utrecht Summer School	NL	N.A	<a href="#">Summer School</a>
Metal Additive Manufacturing Technologies	EPMA	SE	N.A	<a href="#">Seminar</a>
Additive Manufacturing – 3D Printing	LUT University	FI	N.A	<a href="#">Summer School</a>

Title	Institution	Country	EQF level	Type of programme
Additive Manufacturing of Complex Shapes for Construction (3D Build 2019)	National School of Architecture and Landscape Architecture of Lille, the Civil and Environmental Engineering Department of the Institut Mines-Télécom Lille Douai and the Lille Northern France Higher Education & Research Institutions Association	FR	N.A	<a href="#">Summer School</a>
Metal Additive Manufacturing for Real Industrial Applications: From the Lab to the Product	DREAM Summer School	IT	N.A	<a href="#">Summer School</a>
2019 EASA-FAA Workshop on Additive Manufacturing	European Union Aviation Safety Agency (EASA)	DE	N.A	<a href="#">Workshop</a>
LILIAM	Politecnico di Milano	IT	N.A	-
Industrial Additive Manufacturing Master Course 2019-2020	Mondragon University-Goierri Eskola-Lortek	ES	N.A	<a href="#">New graduates and professionals</a>