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| **Route** | **Engineering and Manufacturing** |  | **T Level** | **Engineering and Manufacturing, Processing and Control** |

Providing students with meaningful industry placement experiences is a vital part of building employability skills and provides

responsibilities linked to their T Level course.

This ***Typical Tasks Checklist*** will help you as an employer engagement colleague to work with employers to see how they can support students and identify the types of projects and tasks that a student can get involved with.

The employer may be able to offer some or all these opportunities to students. Completing the checklist will aid your discussions and help you to plan and reach decisions.

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| ***Link to the T Level outline content*** <https://www.instituteforapprenticeships.org/qualifications/t-levels/approved-t-level-technical-qualifications-and-final-outline-content/final-outline-content/>  |

| **Employability Skills** | **How might we do this?** | **Opportunities**Y / N / maybe |
| --- | --- | --- |
| **Communication skills**the ability to express or explain themselves clearly and effectively in different situations, such as speaking, writing, listening, and presenting.  | An employer or supervisor can help young workers understand what is expected of them in terms of communication by providing opportunities and feedback. Real business examples that demonstrate how to communicate effectively in different situations, the purpose, audience, tone, format, style of messages, and the channel of communication are helpful. This could be through writing an email, making a phone call, giving a presentation, or participating in a meeting.  |  |
| **Teamwork skills**the ability to collaborate and cooperate with others, such as sharing ideas, giving, and receiving feedback, resolving conflicts, and supporting group / organisational goals.  | Teamwork skills are essential transferable skills for young people to learn, as they work with others in a group or project and contribute to common goal. Employers can support this by helping students understand their roles and responsibilities within the team, and how they fit into the organisation's bigger picture. Employers can also encourage students to participate actively in team meetings and discussions, and to listen to and respect different perspectives and opinions. |  |
| **Problem-solving skills**the ability to identify, analyse, and solve problems using creative and critical thinking, such as defining the problem, generating alternatives, evaluating options, and implementing solutions. | An employer can help young workers to develop their problem-solving skills by encouraging them to think critically and analytically about issues in the workplace, to ask relevant questions and gather related information. An employer can also help young workers use various tools and methods to analyse and interpret data, such as charts, graphs, statistics, or logic models.  |  |
| **Self-management skills**the ability to plan, organise, and prioritise one's own work, such as setting goals, managing time, meeting deadlines, and being resilient.  | Providing clear and constructive feedback is essential for learning and improvement. It helps young workers identify their strengths and areas for development and guides them on how to improve their performance and skills. Setting clear and reinforcing realistic expectations will a help. The learning provider will be on hand to support or advise with this. |  |
| **Learning skills**the ability to acquire and apply new knowledge and skills in a non-educational setting, such as seeking feedback, reflecting on one's own performance, and adapting to changing situations and expectations.  | Offering training and mentoring opportunities can help young workers gain new knowledge and skills, as well as learn from the experience and advice of more senior or experienced colleagues or experts. A work culture that values learning and respects diversity, encourages collaboration and communication, and fosters trust and mutual support can help young workers feel more confident and comfortable in expressing their ideas, opinions, and concerns, and in seeking and offering help when needed. |  |
| **Digital skills**the ability to use and understand various digital tools and technologies used in the business context, such as computers, software, internet, social media, and online platforms. | Using digital tools and technologies can help young workers enhance their productivity and efficiency, as well as their ability to communicate and collaborate with others, and to effectively use information and resources in a workplace context often for the first time. Employers should think about how they can provide training and support on how to use relevant software and tools successfully and responsibly.  |  |

| **T Level Core Skills****ENGINEERING AND MANUFACTURING, PROCESSING AND CONTROL** | **Opportunities**Y / N / Maybe |  | **Occupational Specialism****FITTING AND ASSEMBLY TECHNOLOGIES** | **Opportunities**Y / N / Maybe |
| --- | --- | --- | --- | --- |
| Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings, and specifications. |  |  | Work on and interpret technical information, applying technical skills to plan, assess risk and follow safe working methods to practical tasks and procedures. Respond to the requirements of a brief, to produce a quality of work that meets tolerances, regulations, and standards. |  |
| Plan and prepare the relevant processes, tools, equipment, and resources, needed to manufacture relevant products, and produce appropriate outcomes. |  |  | Prepare materials, components, tooling, machinery and perform necessary checks. |  |
| Produce relevant products and outcomes, considering the specified requirements, context, and materials, using the relevant composite manufacturing technologies, methods, and processes. |  |  | Identify causes and diagnose problems or common issues related to fitting and assembly and have a thorough understanding and the skills to be able resolve and rectify them. |  |
| Support the delivery (and management) of relevant projects and activities, helping to evaluate and review processes and outcomes, and to improve practices. |  |  | Measure and mark out components according to specifications and requirements, recognising, selecting, and using most appropriate tools and equipment. |  |
| Communicate production information, proposals, and solutions, producing, recording, and explaining relevant technical information, representations, processes, and outcomes. |  |  | Select and apply the appropriate production methodsin line with available technology, quantities required, value of items, accuracy required and customer requirements. |  |
|  |  |  | Plan and prepare the work area to allow for disassembly of components and sub-assemblies in accordance with specific working procedures. |  |
|  |  |  | Replace any items that have perished and ensure stock levels are accounted for. Dispose of waste as per legislation and company procedures. |  |

Space for notes / reminders re: ideas for tasks, resources, or queries

*Notes: Blank template boxes for the remaining occupational specialisms are provided for you as an employer engagement and / or curriculum professional to complete.*

| **T Level Core Skills****DESIGN AND DEVELOPMENT FOR ENGINEERING AND MANUFACTURING** | **Opportunities**Y / N / Maybe |  | **Occupational Specialism****MACHINING AND TOOLMAKING TECHNOLOGIES** | **Opportunities**Y / N / Maybe |
| --- | --- | --- | --- | --- |
| Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings, and specifications. |  |  |  |  |
| Plan and prepare the relevant processes, tools, equipment, and resources, needed to manufacture relevant products, and produce appropriate outcomes. |  |  |  |  |
| Produce relevant products and outcomes, considering the specified requirements, context, and materials, using the relevant composite manufacturing technologies, methods, and processes. |  |  |  |  |
| Support the delivery (and management) of relevant projects and activities, helping to evaluate and review processes and outcomes, and to improve practices. |  |  |  |  |
| Communicate production information, proposals, and solutions, producing, recording, and explaining relevant technical information, representations, processes, and outcomes. |  |  |  |  |
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Space for notes / reminders re: ideas for tasks, resources, or queries

| **T Level Core Skills****DESIGN AND DEVELOPMENT FOR ENGINEERING AND MANUFACTURING** | **Opportunities**Y / N / Maybe |  | **Occupational Specialism****COMPOSITES MANUFACTURING TECHNOLOGIES** | **Opportunities**Y / N / Maybe |
| --- | --- | --- | --- | --- |
| Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings, and specifications. |  |  |  |  |
| Plan and prepare the relevant processes, tools, equipment, and resources, needed to manufacture relevant products, and produce appropriate outcomes. |  |  |  |  |
| Produce relevant products and outcomes, considering the specified requirements, context, and materials, using the relevant composite manufacturing technologies, methods, and processes. |  |  |  |  |
| Support the delivery (and management) of relevant projects and activities, helping to evaluate and review processes and outcomes, and to improve practices. |  |  |  |  |
| Communicate production information, proposals, and solutions, producing, recording, and explaining relevant technical information, representations, processes, and outcomes. |  |  |  |  |
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Space for notes / reminders re: ideas for tasks, resources, or queries

| **T Level Core Skills****DESIGN AND DEVELOPMENT FOR ENGINEERING AND MANUFACTURING** | **Opportunities**Y / N / Maybe |  | **Occupational Specialism****FABRICATION AND WELDING TECHNOLOGIES** | **Opportunities**Y / N / Maybe |
| --- | --- | --- | --- | --- |
| Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings, and specifications. |  |  |  |  |
| Plan and prepare the relevant processes, tools, equipment, and resources, needed to manufacture relevant products, and produce appropriate outcomes. |  |  |  |  |
| Produce relevant products and outcomes, considering the specified requirements, context, and materials, using the relevant composite manufacturing technologies, methods, and processes. |  |  |  |  |
| Support the delivery (and management) of relevant projects and activities, helping to evaluate and review processes and outcomes, and to improve practices. |  |  |  |  |
| Communicate production information, proposals, and solutions, producing, recording, and explaining relevant technical information, representations, processes, and outcomes. |  |  |  |  |
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Space for notes / reminders re: ideas for tasks, resources, or queries