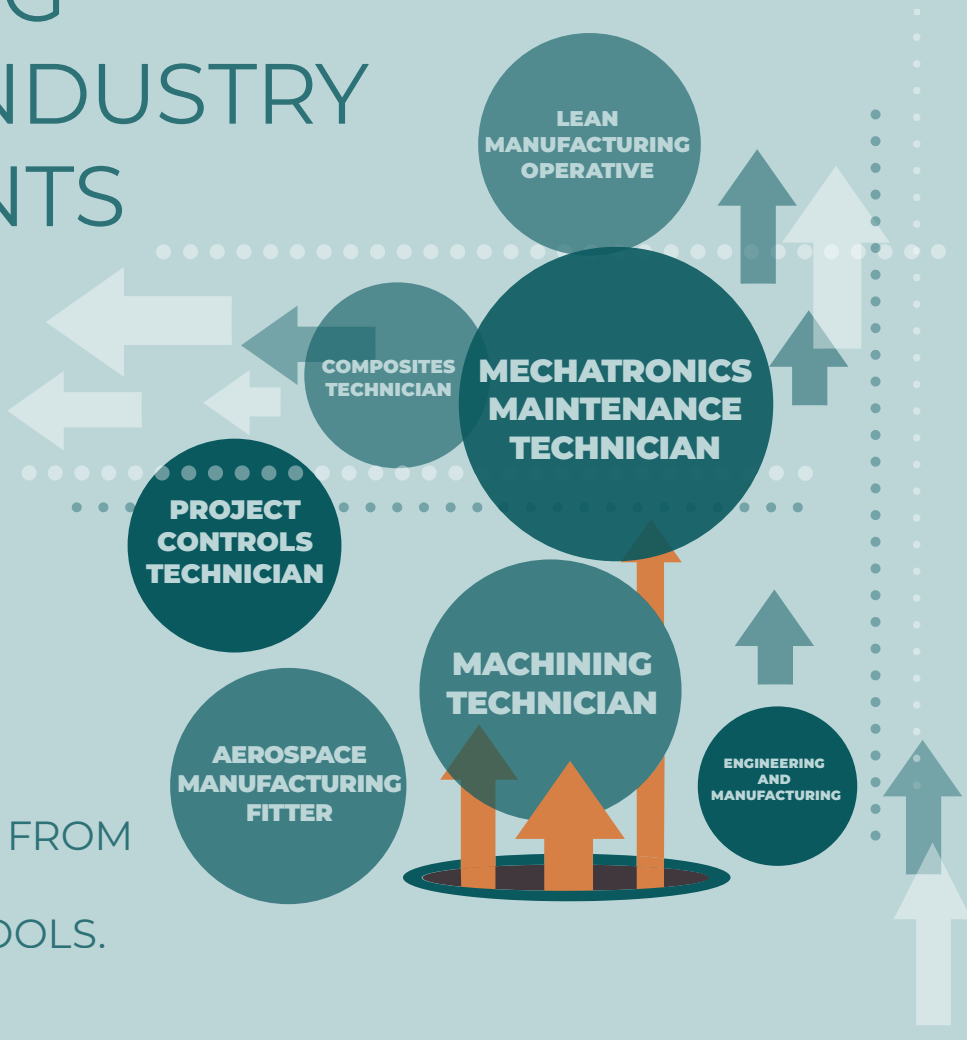
T-LEVELS
THE NEXT LEVEL QUALIFICATION

ENGINEERING AND MANUFACTURING

DELIVERING STRONG INDUSTRY PLACEMENTS



A SHARED AMBITION FROM T LEVEL EMPLOYERS, COLLEGES AND SCHOOLS.

WHAT STRONG INDUSTRY PLACEMENTS LOOK LIKE

This page sets out the key features that underpin strong industry placements in practice. It provides a clear, shared way to understand what makes placements work well for employers, students, colleges and schools.

THE FOUNDATIONS OF A STRONG PLACEMENT

MAKE THE PLACEMENT CLEAR AND MANAGEABLE

The role is realistic, expectations are clear, and hosting fits within real working environments

PREPARE STUDENTS FOR HOW WORK REALLY HAPPENS

Students understand teamwork, iteration, tools and routine tasks before they arrive

HELP STUDENTS CONTRIBUTE TO REAL WORK

Students take part in genuine work through systems, tasks and team activity – not observation alone

CONNECT THE PLACEMENT TO LEARNING AND PROGRESSION

Students can reflect on their experience and link it to skills, knowledge and progression

BUILD PLACEMENTS THAT CAN BE REPEATED AND IMPROVED

The experience works for all partners, making future placements easier to deliver

5 elements

Strong engineering and manufacturing placements are built on five connected elements:

1. employers feel clear and confident about what is involved;
2. students arrive ready for how work is carried out in real environments;
3. they contribute to genuine tasks and team activity;
4. their experience connects to learning and progression; and
5. the placement is manageable and repeatable over time.



USING THIS RESOURCE IN PRACTICE

It can be used to:

- support early conversations with employers about what a placement could involve
- align curriculum, placement and employer engagement teams around a shared approach
- shape realistic placement roles based on how engineering and manufacturing work actually happens
- strengthen student preparation by making expectations clear
- review placement quality and identify small improvements that can be made

SHARED EXPECTATIONS FROM EMPLOYERS AND T LEVEL COLLEGES AND SCHOOLS

At a glance: what strong placements look like

Strong industry placements typically:

- feel manageable and worthwhile for employers
- prepare students for real working environments
- enable contribution to genuine work
- connect to learning, reflection and progression
- build relationships that can be sustained over time
- develop a pipeline of talent for the industry

Strong placements are not defined by the scale or complexity of work, but by how well the experience reflects real work and enables meaningful contribution within a team or business.

This resource sets out the shared expectations that underpin strong placements across T Level pathways. It is designed as a practical reference for employers, colleges and schools to support placements that are realistic, valuable and repeatable.

WHY THIS MATTERS

Engineering and manufacturing workplaces regularly bring in new people – apprentices, interns, junior hires and students. The same fundamentals shape whether those experiences work well: clarity about the role, realistic expectations and the opportunity to contribute to real work.

As industry placements have developed, employers, colleges and schools have worked together to understand what leads to a positive experience – one that supports students while working for busy teams.

There is strong sector-wide commitment to ensuring placements are meaningful rather than transactional. A shared understanding of what strong placements look like helps create consistency and makes placements easier to sustain over time.

WHAT IS DISTINCTIVE ABOUT ENGINEERING AND MANUFACTURING PLACEMENTS

Engineering and manufacturing placements are shaped by the nature of the work. Environments are often structured, safety-critical and process-driven, with tasks carried out within defined workflows and quality standards.

Students typically engage alongside existing activity rather than being given standalone or artificial tasks. Work is often interdependent, so students need to understand how tasks fit within wider processes before contributing.

Placements are commonly based in workshops, production environments or operational settings where safety, sequencing and supervision are essential. Students may begin by observing and supporting activity before moving into more active participation as their confidence develops.

Students are not expected to work independently at the outset. Instead, they build understanding through observation, guided activity and progressively more active participation, within appropriate levels of supervision and risk.

This requires careful planning and collaboration between employers, colleges and schools to ensure placements are safe, meaningful and manageable, while still reflecting real working practice.

THE BREADTH OF ENGINEERING AND MANUFACTURING PLACEMENTS

Industry placements take place across a wide range of engineering and manufacturing areas, including:

- **aerospace**
- **automation and control**
- **automotive**
- **CAD and design**
- **chemical engineering**
- **electrical and electronics**
- **energy**
- **fabrication and welding**
- **manufacturing**
- **mechanical engineering**
- **mechatronics**
- **rail**

Placements may take place in workshops, factories, offices or on-site environments, depending on the nature of the work.

ENGINEERING AND MANUFACTURING: EXAMPLES OF MEANINGFUL ACTIVITY

The examples below are prompts for discussion. They should be shaped around the employer's setting, the student's readiness, the working environment and any safety, supervision, access or quality requirements.

TYPE OF ACTIVITY	EARLY CONTRIBUTION	MORE DEVELOPED STRETCH
Workshop, production or operational support	Observe processes, help prepare materials, organise tools or support basic supervised tasks.	Contribute to a defined stage of a process, explain why sequencing matters and identify where quality or safety checks apply.
Quality checks and inspection	Observe inspections, record measurements or check information against agreed criteria.	Compare results, identify variations, summarise findings and explain possible causes or next steps.
Design, CAD and technical information	Review drawings, specifications or design information with support.	Update a simple drawing, annotate technical information, compare design options or explain how a design links to production or installation.
Maintenance, equipment and work areas	Support checks of equipment, tools, stock or work areas under supervision.	Help maintain a log, identify repeat issues, suggest small improvements to organisation, safety or efficiency.
Testing, diagnostics and problem-solving	Observe testing or diagnostic processes and record results clearly.	Support simple fault-finding, compare expected and actual results and explain what the evidence suggests.
Process improvement and workflow	Follow an existing process and record what happens at each stage.	Map a process, identify pressure points, suggest a small improvement and explain the potential impact on quality, time or safety.
Team communication and project support	Attend briefings, toolbox talks or team meetings, and record actions or key points.	Track actions, prepare a short update, support handover information or reflect on how teams coordinate work safely and effectively.

WHAT STRONG PLACEMENTS LOOK LIKE IN PRACTICE

MAKE THE PLACEMENT CLEAR AND MANAGEABLE

Workplaces operate within live environments shaped by priorities, deadlines and operational demands. Bringing a student into that setting works best when expectations are realistic and agreed early.

In engineering and manufacturing settings, safety, supervision and operational continuity are key considerations. Students typically contribute alongside existing activity rather than being given standalone or artificial tasks, with clear boundaries around what they can safely and realistically undertake.

What matters is clarity about how the student will contribute to day-to-day work and how support will operate. In most environments, work is organised through shared systems and processes, so students take part in real activity rather than separate tasks.

Strong placements typically involve:

- early discussion about the team's work and priorities
- realistic expectations of student capability and pace
- clearly defined points of contact
- proportionate supervision and regular check-ins
- confidence that hosting will be manageable

Flexible placement patterns often reflect real working practice more effectively than fixed weekly models. Project-based blocks or periods aligned to delivery cycles can allow students to experience how work actually happens.

Where any activity takes place away from the employer's usual workplace, it should still involve meaningful employer oversight and be clearly separated from normal classroom learning.

Where employers, colleges and schools shape placements around real activity, while maintaining consistency for the student, the experience is more likely to feel authentic and manageable.

Where employers feel clear and supported, they are far more likely to view the experience positively and host again.

IN PRACTICE, ASK:

- Is the student's role shaped around real engineering or manufacturing activity?
- Does the employer know what the student can realistically and safely do at the start?
- Is there a clear workplace contact for task-setting, questions and check-ins?
- Are expectations clear around safety, supervision, PPE, access, working pattern and communication?
- Does the employer feel the placement is manageable without disrupting safety, quality or productivity?

PREPARE STUDENTS FOR HOW WORK REALLY HAPPENS

Students who settle in quickly tend to have a clear understanding of how workplaces operate before they arrive. In engineering and manufacturing environments, this includes safety expectations, workplace behaviours and the importance of following processes accurately.

Students should not arrive expecting to be taught everything from scratch. Preparation before placement is critical to success.

Most roles involve collaboration, iteration and routine groundwork alongside more visible tasks. Students need to understand this in advance so they can engage positively with the full range of activity they may encounter, from support tasks and documentation through to practical work, research or shadowing.

This also includes understanding how work is organised through shared systems and processes, and how tasks are assigned, tracked and completed within teams.

Strong placements are characterised by students who:

- understand that routine tasks are part of delivery
- are ready to work as part of a team
- communicate clearly and respond to feedback
- recognise the importance of reliability and professionalism
- show curiosity about how work flows through the organisation

Alongside technical activity, students develop core employability skills through exposure to real working environments, including communication, teamwork, reliability and professional confidence.

When expectations are clear from the outset, students integrate more quickly and require less intensive supervision.

IN PRACTICE, ASK:

- Does the student understand how work is organised in this engineering or manufacturing setting?
- Has the student been prepared for safety-critical, process-driven and team-based work?
- Does the student understand expectations around PPE, following instructions, reliability and professional behaviour?
- Is the student ready to ask questions, follow processes and check before acting?
- Are curriculum and placement staff confident the student is ready enough for placement?

HELP STUDENTS CONTRIBUTE TO REAL WORK

The most effective placements allow students to take part in real work, contributing to tasks that reflect entry-level roles, even in small ways. This builds confidence and gives employers a clearer sense of a student's developing capability.

In engineering and manufacturing environments, contribution typically develops over time, moving from observation to supported participation as confidence and competence grow.

Depending on the workplace, this may include:

- observing processes and understanding how work is carried out
- assisting with preparation, setup or basic tasks under supervision
- supporting quality checks, inspections or testing processes
- carrying out simple, structured tasks with clear guidance
- helping maintain equipment, tools or work areas
- recording information, measurements or observations
- contributing to team activity in a safe and controlled way

These tasks are usually aligned to existing processes and supported through appropriate supervision, ensuring they are carried out safely and effectively.

This progression helps students understand pace, standards and collaboration in a way that observation alone rarely achieves.

Students benefit from regular, informal feedback. Short check-ins help them understand expectations, build confidence and improve quickly.

IN PRACTICE, ASK:

- Is the student contributing to real work in a safe and structured way, not just observing?
- Is there a planned progression from observation to supported participation?
- Are tasks stretching the student appropriately for Level 3, without exceeding safe boundaries?
- Does the student understand why the task matters to quality, safety, workflow or the wider team?
- Could the student produce something useful, such as a log, measurement record, process map, inspection summary or improvement note?

CONNECT THE PLACEMENT TO LEARNING AND PROGRESSION

Placements are most valuable when students can make sense of what they are seeing and doing. When workplace experiences connect back to learning, students develop a clearer sense of direction and professional identity.

Strong placements are planned around clear learning goals that help the student understand what they are developing and how this connects to their T Level, future progression and workplace expectations. These goals should be reviewed during the placement, so the student, employer and college or school can see how progress is being made.

This is strengthened when students are supported to reflect on their experience and understand how it links to their skills, knowledge and future progression. This is most effective where:

- students are prepared before they start
- teachers understand the nature of placement activity
- students reflect on what they have learned
- workplace examples are shared and discussed
- links to progression opportunities are visible

The aim is not to replicate classroom learning in the workplace, but to deepen and contextualise it.

IN PRACTICE, ASK:

- Can the student explain what they are learning, not just what they are doing?
- Do teachers and placement staff understand the engineering or manufacturing activity taking place?
- Are students reflecting on technical skills, safety behaviours and workplace practices developed through placement?
- Are workplace examples being used to strengthen classroom learning?
- Can the student see links to future roles, apprenticeships or employment in engineering and manufacturing?

BUILD PLACEMENTS THAT CAN BE REPEATED AND IMPROVED

Strong placements are rarely one-off successes. Where expectations are clear and placements feel manageable and worthwhile, employers are far more likely to host again and develop the relationship over time.

This leads to:

- more stable placement opportunities
- greater employer confidence
- clearer progression pathways
- reduced pressure on colleges and schools to continually source new hosts

Strong placements improve over time through feedback and refinement. Small, practical adjustments, informed by employer and student feedback, tend to have the greatest impact.

In practice, this often includes:

- regular review points with the student and employer, including a final review, to check progress, wellbeing, learning goals, suitability of activities and any support needed
- honest feedback from employers and students
- colleges and schools using feedback to strengthen preparation and matching
- small adjustments each year rather than large redesigns

Where this cycle is in place, placements become easier to sustain and improve, particularly when they are integrated into existing workflows without affecting safety or productivity.

IN PRACTICE, ASK:

- Does the placement fit naturally into existing workflows, supervision arrangements and safety controls?
- Would the employer feel confident hosting again?
- What feedback has been gathered from the student and employer?
- Has the college or school used feedback to improve preparation, matching or support?
- Are there tasks, templates, processes or supervised activities that could be reused for future students?

WHAT THIS LOOKS LIKE IN PRACTICE ACROSS ROLES

Strong placements do not happen by chance. They are shaped through clear roles, shared understanding and ongoing alignment between those involved.

IF YOU ARE AN EMPLOYER

Your role is to provide a structured and realistic experience within your working environment.

In strong placements, this typically means:

- being clear about what the student will and will not be doing
- involving the student in genuine workflow wherever possible
- recognising that students may need guidance in early stages, particularly around behaviour and expectations
- providing proportionate supervision and regular feedback
- viewing the placement as early talent development rather than additional capacity
- offering brief, focused feedback that helps the student understand their strengths and areas for development.

A manageable, well-structured placement builds confidence for both you and future students.

IF YOU ARE AN EMPLOYER ENGAGEMENT PROFESSIONAL

Your role is to create clarity and alignment between the employer and the school or college.

In strong placements, this typically means:

- setting realistic expectations with employers about student contribution and capability
- shaping placements around real workflows rather than artificial or standalone tasks
- ensuring communication is clear and consistent before and during the placement
- supporting regular feedback between employer and student
- building relationships that can be sustained over time

Strong placements are built through active alignment, not passive coordination.

IF YOU ARE A TEACHER OR CURRICULUM LEAD

Your role is to prepare students for the realities of work and connect placement to learning.

In strong placements, this typically means:

- making the nature of working life explicit, including teamwork, routine tasks and professional expectations
- preparing students for contribution, not observation
- reinforcing reliability, communication and responsiveness as core employability skills
- building structured reflection into learning so placement experience is understood and applied
- engaging with placement context so teaching reflects real workplace practice

Placement is not separate from the curriculum. It is part of how students develop professional identity.

HOW STRONG IS THIS ENGINEERING AND MANUFACTURING INDUSTRY PLACEMENT?

A quick check to support planning, conversations and reflection.

Use this as a quick conversation tool with employers, curriculum teams or colleagues to sense-check placement quality at any stage.

MAKE THE PLACEMENT CLEAR AND MANAGEABLE

Employer understands the student's role, feels the placement is manageable, and has clear expectations of support and contribution

WHERE ARE WE NOW? ✓

- EMERGING ☐
- DEVELOPING ☐
- STRONG ☐

PREPARE STUDENTS FOR HOW WORK REALLY HAPPENS

Student understands how work is organised (e.g. tasks, schedules, team processes) and is prepared for routine activity, demonstrating reliability, communication and professionalism

WHERE ARE WE NOW? ✓

- EMERGING ☐
- DEVELOPING ☐
- STRONG ☐

HELP STUDENTS CONTRIBUTE TO REAL WORK

Student contributes to real work in a safe and structured way (e.g. observation, assisted tasks, supervised activity), not just observation alone

WHERE ARE WE NOW? ✓

- EMERGING ☐
- DEVELOPING ☐
- STRONG ☐

CONNECT THE PLACEMENT TO LEARNING AND PROGRESSION

Placement activity links to curriculum, and students can reflect on and make sense of what they are doing

WHERE ARE WE NOW? ✓

- EMERGING ☐
- DEVELOPING ☐
- STRONG ☐

BUILD PLACEMENTS THAT CAN BE REPEATED AND IMPROVED

Placement feels worthwhile and manageable, with potential for the employer to host again

WHERE ARE WE NOW? ✓

- EMERGING ☐
- DEVELOPING ☐
- STRONG ☐

QUICK REFLECTION PROMPTS

Use these to guide discussion:

- Is the student contributing, or mainly observing?
- Does the employer feel this is manageable and worthwhile?
- Are expectations clear on both sides?
- Can the student explain what they are learning and why it matters?
- Would this employer choose to host again?

WHAT TO DO NEXT

MOSTLY EMERGING
→ clarify expectations, simplify scope, strengthen preparation

MIXED
→ adjust structure, improve feedback, align curriculum more closely

MOSTLY STRONG
→ capture what works and builds towards repeat placements

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