# About this guide

This guide has been designed to help centres plan and deliver a T Level Foundation Course with confidence, providing curriculum mapping for effective course delivery. It illustrates how the National Technical Outcomes (NTOs) can be translated into practical delivery, incorporating examples of embedded English, maths, and digital skills, assessment approaches, and clear progression links to T Levels.

The guide includes:

* NTO outcomes mapped to example delivery and assessment approaches with worked examples for each course
* a blank template for centre adaptation to meet learner needs, local context, and employer engagement opportunities
* suggestions for flexible delivery and assessment, offering examples rather than prescriptive methods.

# Construction and the Built Environment:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to**  **T Level** |
| **O1. Develop ideas to meet planning requirements for sustainable construction projects** | Sustainable design principles, planning regulations, and environmental impact assessment | Workshops on sustainable design, case studies, and planning simulations | English: report writing, verbal communication  Maths: interpreting data, calculations  Digital: using design software | Written report on sustainable design proposal | Building Services Engineering for Construction,  Design, Surveying, and Planning |
| **O2. Design sustainable construction projects** | Design techniques, material selection, energy efficiency, and building regulations | Practical design exercises, group projects, and site visits | English: technical documentation, presentations  Maths: measurements, budgeting  Digital: CAD software, project management tools | Design portfolio and presentation | Design, Surveying, and Planning |
| **O3. Produce sustainable construction project outputs** | Project implementation, quality control, site management, and health and safety | Site-based projects, role-playing scenarios, and industry placements | English: communication, documentation  Maths: scheduling, cost estimation  Digital: project tracking tools | Practical assessment of project execution | Building Services Engineering for Construction, Design, Surveying, and Planning |

# Digital:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1. Analyse data to meet the requirements of client briefs** | Data analysis, data interpretation, client communication, and report writing | Case studies, data analysis exercises, and client brief simulations | English: report writing, interpreting data  Maths: statistical analysis, data interpretation  Digital: data analysis tools | Written report based on data analysis | Digital Data Analytics; Digital Support and Security; Digital Software Development |
| **O2. Plan for cyber security resilience** | Cyber security principles, risk assessment, resilience strategies, and threat mitigation | Workshops, scenario-based learning, risk assessment exercises | English: documentation, presenting findings  Maths: risk assessment calculations  Digital: cyber security tools | Cyber security plan and risk assessment report | Digital Data Analytics; Digital Support and Security; Digital Software Development |
| **O3. Apply coding skills to produce a digital project output** | Programming concepts, coding languages, project development, and debugging | Coding workshops, project-based learning, and peer reviews | English: project documentation, code commenting  Maths: algorithm development, logic  Digital: programming languages, development environments | Completed digital project and code review | Digital Software Development |

# Education and Early Years:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1. Plan learning activities to support children’s development** | Understanding child development theories, activity planning, and learning outcomes | Workshops on activity planning, case studies, and role-play scenarios | English: Writing activity plans, verbal communication  Maths: Estimating resources, scheduling  Digital: Using planning software | Written activity plan and presentation | Education and Early Years |
| **O2. Prepare environments for learning activities to support children’s development** | Creating safe and stimulating learning environments, and resource management | Practical sessions on setting up learning spaces, group discussions | English: Describing environments, report writing  Maths: Organising resources, budgeting  Digital: Documenting environments using digital tools | Practical assessment of the prepared learning environment | Education and Early Years |
| **O3. Contribute to the assessment of children’s development** | Observation techniques, assessment methods, and developmental milestones | Observation exercises, assessment tool training, and case study analyses | English: Writing observation notes, report writing  Maths: Tracking developmental progress  Digital: Using digital assessment tools | Observation report and developmental assessment | Education and Early Years |

# Engineering and Manufacturing:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1. Develop ideas for engineering products to meet specifications** | Understanding design briefs, material properties, CAD software, and prototyping | Workshops on CAD, material selection exercises, and group design challenges | English: Technical writing, presenting ideas  Maths: Measurements, calculations  Digital: CAD software, simulation tools | Design proposal and prototype evaluation | Engineering and Manufacturing, Maintenance, Installation, and Repair for Engineering and Manufacturing, Engineering, Manufacturing, Processing, and Control |
| **O2. Produce sustainable engineered products** | Sustainable materials, energy-efficient design, and waste reduction techniques | Practical sessions on sustainable materials, energy audits, and recycling methods | English: Report writing, presenting findings  Maths: Calculating energy efficiency, cost analysis  Digital: Using simulation software for energy analysis | Sustainability report and product prototype | Engineering and Manufacturing, Maintenance, Installation, and Repair for Engineering and Manufacturing, Engineering, Manufacturing, Processing, and Control |
| **O3. Solve sustainability problems with innovative engineering ideas** | Problem-solving methodologies, innovation in design, and environmental impact assessment | Case studies on engineering solutions, brainstorming sessions, and environmental impact analysis | English: Technical documentation, presenting solutions  Maths: Data analysis, cost-benefit analysis  Digital: Using software for environmental impact simulations | Problem-solving report and presentation | Engineering and Manufacturing |

# Health and Science:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1. Apply knowledge and understanding of scientific theories, concepts, and principles to health and science contexts** | Cells, microbiology, particles, acids/bases, waves, ionising radiation (applied to H and SC contexts) | Taught workshops with applied mini-tasks (e.g., imaging, infection control contexts) | English: short explanations  Maths: simple calculations  Digital: data capture | Short quizzes and contextual write-ups | Health  Science |
| **O2A. Provide person-centred care to support the health and wellbeing of individuals** | A and P basics, vital signs, communication, infection prevention, and duty of care | Simulated care scenarios, reflections | English: care notes  Maths: observation trends  Digital: record keeping | Observation checklist and care plan | Health |
| **O2B. Follow SOPs to perform laboratory analysis** | SOPs, equipment handling, accuracy/precision, safe working, recording | Supervised practicals and lab book skills | English: lab reports  Maths: measurements  Digital: data logging | Practical observation and lab book | Science |
| **O3. Analyse information and data to highlight health and science issues** | Data analysis, trends, interpretation, and presenting findings | Use public-health or experiment data → analyse → report | English: report  Maths: averages/graphs  Digital: spreadsheet tools | Data analysis report and presentation | Health  Science |

# Business and Administration:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **Outcome 1: Assess the performance of businesses** | Business performance (financial and non-financial), data analysis, and stakeholders | Review case studies of local businesses, analyse performance data using spreadsheets | English: report writing, interpreting business data  Maths: data analysis (statistics, trends, ratios)  Digital: use of spreadsheets | Written report based on business performance analysis | Management and Administration, |
| **Outcome 2: Plan for sustainable business change** | Change management, project management, sustainability, and drivers for change | Case study of a business undergoing change and project planning for change | English: project proposal, presenting change plans  Maths: budgeting, resource estimation  Digital: project management software | Project proposal and oral presentation | Management and Administration, |
| **Outcome 3: Collaborate as a team member to develop sustainable business systems** | Business systems, team dynamics, communication, and documentation | Collaborative group work to design and implement a business system for a project (e.g., recruitment process, event planning) | English: communication, written documentation  Maths: scheduling, budgeting  Digital: document management software, communication tools | Group project and individual reflection report | Management and Administration |

Agriculture, Environmental, and Animal Care:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1: Apply knowledge and understanding of scientific concepts and principles to agriculture, environmental, and animal care contexts** | Scientific principles, environmental impact, and sustainability | Practical experiments, field studies, case analyses | English: report writing, data interpretation  Maths: measurements, data analysis  Digital: data logging tools | Scientific report or presentation | Agriculture, Land Management and Production; Animal Care and Management |
| **O2: Develop enterprising ideas for business development opportunities in agriculture, environmental, and animal care businesses** | Business planning, market research, and financial forecasting | Business simulation games, market analysis projects | English: business plan writing, presentations  Maths: budgeting, financial calculations  Digital: business planning software | Business plan and pitch presentation | Agriculture, Land Management and Production; Animal Care and Management |
| **O3A: Maintain the health and welfare of animals** | Animal health monitoring, welfare standards, and disease prevention | Hands-on animal care sessions, health assessments, and welfare audits | English: care logs, incident reports  Maths: health statistics analysis  Digital: digital record-keeping | Practical assessment of animal care and welfare report | Animal Care and Management |
| **O3B: Support the sustainable development of plants** | Plant growth cycles, sustainable cultivation, pest and disease management | Horticulture projects, plant monitoring, and sustainable farming practices | English: plant care journals, research papers  Maths: growth measurements, yield calculations  Digital: plant growth tracking software | Plant development project and growth analysis report | Agriculture, Land Management, and Production |

Creative and Design:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1: Apply creative thinking and problem-solving skills to design briefs** | Creative thinking, problem-solving, idea generation, and design process | Design challenges, brainstorming sessions, concept development workshops | English: presenting ideas, written reflections  Maths: measurements, proportions  Digital: design software, digital sketching | Design concept portfolio and presentation | Craft and Design, Media. Broadcast and Production |
| **O2: Develop and refine design solutions through iterative processes** | Design development, prototyping, feedback incorporation, and refinement techniques | Prototype creation, peer reviews, iterative design cycles | English: feedback interpretation, documentation  Maths: scaling, material calculations  Digital: CAD tools and 3D modelling | Prototype and development log with annotated iterations | Craft and Design, Media. Broadcast and Production |
| **O3: Communicate design ideas effectively to stakeholders** | Visual communication, presentation skills, and stakeholder engagement | Presentations, mood boards, design pitches, and client briefs | English: oral presentations, persuasive writing  Maths: cost estimation, budgeting  Digital: presentation software and digital portfolios | Final design presentation and stakeholder feedback report | Craft and Design, Media. Broadcast and Production |

Legal, Finance, and Accounting:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1: Understand the legal and regulatory framework in which financial services operate** | Legal principles, regulatory bodies, and compliance requirements | Case studies of financial institutions, guest speakers from regulatory bodies | English: report writing, summarising legal documents  Maths: interpreting financial data  Digital: researching legal databases | Written report on the legal framework of financial services | Legal Services, Finance |
| **O2: Apply financial principles to support business operations** | Financial statements, budgeting, and financial analysis | Practical exercises in budgeting, analysis of financial statements | English: financial report writing, presenting findings  Maths: budgeting, financial calculations  Digital: spreadsheet software | Budget plan and financial analysis report | Finance, Business |
| **O3: Demonstrate professional behaviours and ethical standards in financial services** | Professional conduct, ethical decision-making, and client confidentiality | Role-playing scenarios, discussions on ethical dilemmas | English: communication skills, ethical report writing  Maths: interpreting numerical data ethically  Digital: using secure communication tools | Role-play assessment and ethical decision-making report | Legal Services, Finance |

Sales, Marketing, and Procurement:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| **O1: Understand the principles of sales, marketing, and procurement** | Sales techniques, marketing strategies, and procurement processes | Case studies, role-playing, and guest speakers from industry | English: report writing, communication skills  Maths: budgeting, cost analysis  Digital: use of CRM software | Written report on sales and marketing strategies | Marketing, |
| **O2: Apply sales and marketing techniques to business scenarios** | Customer relationship management, promotional strategies, and market research | Simulated business scenarios, group projects, and presentations | English: presentation skills, persuasive writing  Maths: statistical analysis, pricing strategies  Digital: social media tools, marketing analytics | Group project and presentation on marketing campaign | Marketing |
| **O3: Demonstrate procurement processes in a business context** | Supplier selection, contract negotiation, and inventory management | Practical exercises, supplier visits, and negotiation workshops | English: email correspondence, contract writing  Maths: cost calculations, inventory tracking  Digital: procurement software | Practical assessment of the procurement process | Marketing |

# Blank Curriculum Mapping Template:

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| **NTO Outcome**  **(DfE title)** | **Knowledge/Skills Focus** | **Suggested Delivery Approach** | **Embedded English/Maths/Digital** | **Suggested Assessment** | **Progression Link to T Level** |
| [Insert NTO statement] | What key knowledge or skills are covered? | How could this be taught? (e.g. classroom, workshop, project, site visit, employer input) | How can English, maths, and digital skills be embedded naturally? | What assessment methods will be used? (e.g. portfolio, presentation, observation, test) | Which T Level does this support? |
| [Insert NTO statement] | … | … | … | … | … |
| [Insert NTO statement] |  |  |  |  |  |