Technical Education Networks

Route: Digital

T Level Digital Production, Design and Development

Guide to T-level curriculum macro-sequencing

This slide deck offers an overview of the components for the T Level Digital Production, Design and Development curriculum.

Where did we get the information from?

- The Association of Colleges (AoC) and Gatsby partnered with T-level providers to explore current practices in macro-sequencing of curriculum delivery models between January and August 2023.
- 55 providers took part in the research: 24 completed a survey, 51 had in-depth interviews, and 55 attended focus groups to create the delivery models presented and insight in this presentation.
- Feedback on emerging models was provided by delegates at Gatsby's Technical Education Networks (TEN) Conference in July 2023.
- Gatsby plan to review and update this insight annually. For more details, please contact TEN@gatsby.org.uk

Digital T-levels

The Digital route includes three T-levels:

1. T Level Digital Production, Design and Development (Pearson)
2. T Level Digital Business Services (NCFE)
3. T Level Digital Support Services (NCFE)

T Level Digital Production, Design and Development

Qualification information

The technical qualification is organised into 8 topic areas in the core and has one occupational specialism.

The overall grading for the technical qualification will be on a scale of Pass, Merit, Distinction, Distinction* with the Core graded A*- E and the Occupational Specialism graded Pass, Merit, Distinction, Distinction*.

Core knowledge and skills support threshold competence in the digital industry and is assessed through two examinations and the employer set project.

Core exam overview

Exam Paper 1	Exam Paper 2
1 Problem solving	5 Business context
2 Introduction to programming	6 Data
3 Emerging issues and impact of digital	7 Digital environment
4 Legislation and regulatory requirements	8 Security

Employer Set Project (ESP)

The Employer Set Project (ESP) assesses core knowledge and skills and eight essential skills.

- Skill 1: Reflective evaluation
- Skill 2: Communication
- Skill 3: Working with others
- Skill 4: Develop software
- Skill 5: Problem solving
- Skill 6: Create an artefact
- Skill 7: Apply a logical approach to problem solving
- Skill 8: Ensure software development activity mitigates risks to security

The ESP is completed from mid-May to mid-June and there are five tasks to the assessment. Students are permitted 14 hours and 30 minutes to complete the ESP and are given the pre-release set task brief 1 week before the start of Task 1.

- Task 1: Planning a project
- Task 2: Identifying and fixing defects in existing code
- Task 3: Designing a solution
- Task 4a: Developing the solution
- Task 4b: Reflective evaluation

What is macro-sequencing?

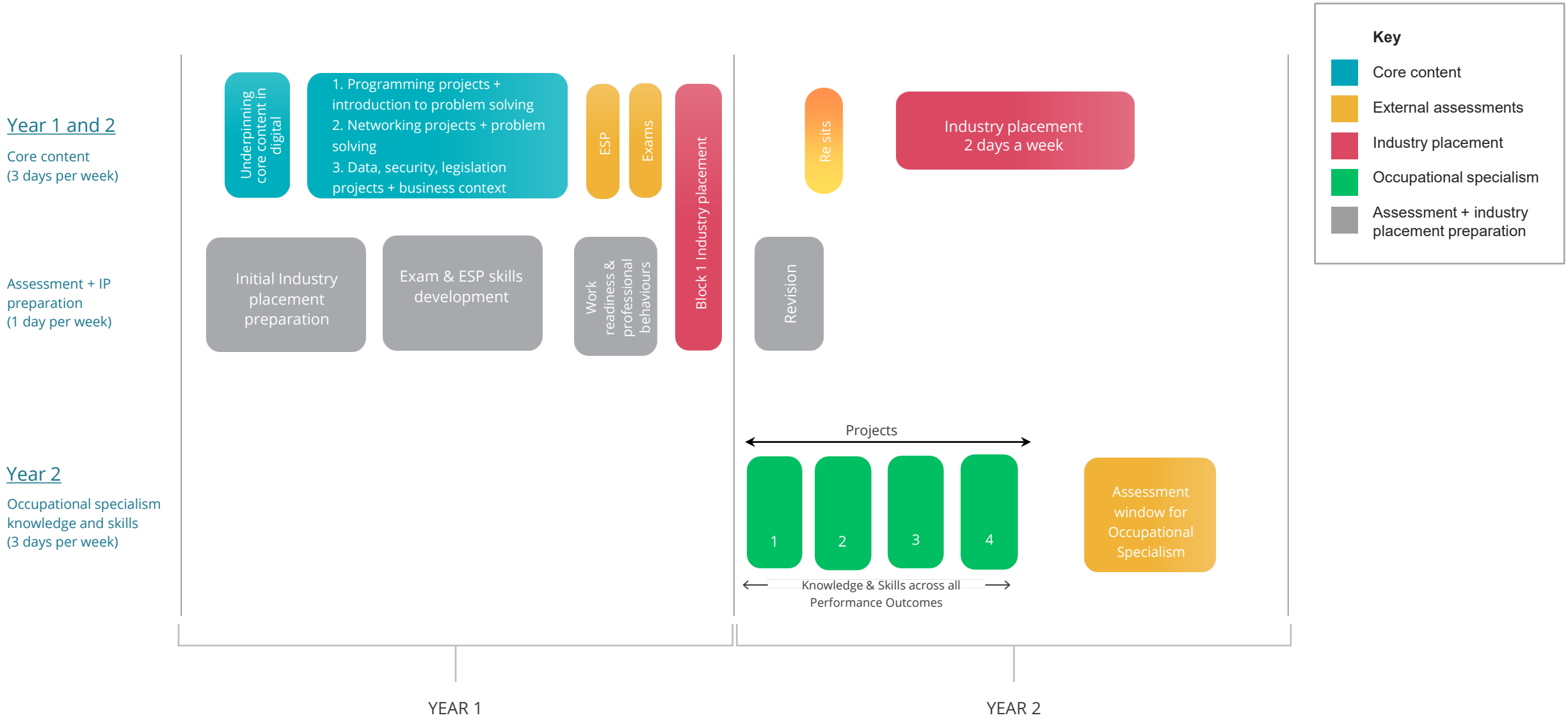
Macro-sequencing is a structured and logical progression of the curriculum programme informed by pedagogical decisions.

The following models summarise provider feedback on their sequencing of the macro components of the T-level, including the core, occupational specialism and industry placement.

The following slides and assessment elements provide two suggested curriculum models for the macro-sequencing of T Level in Digital Production, Design and Development.

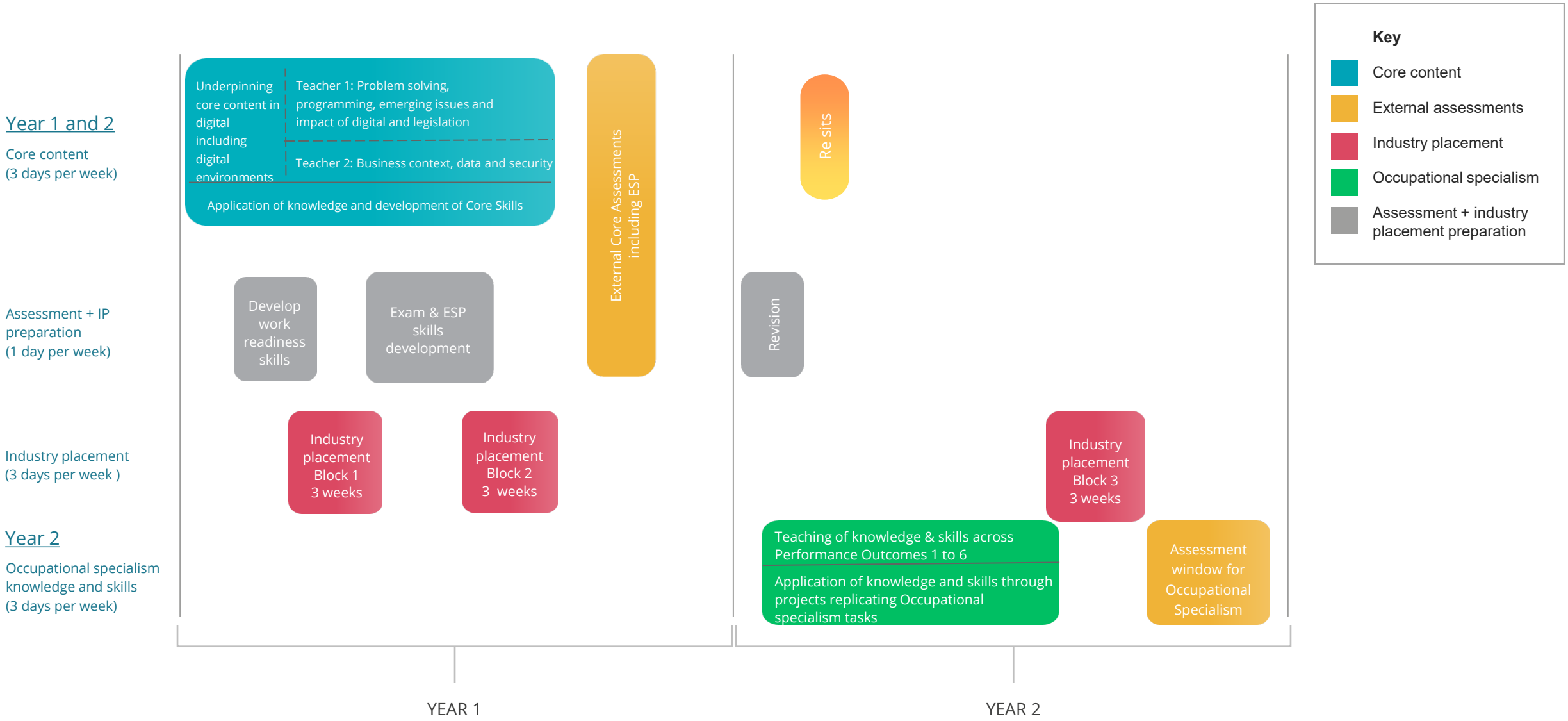
T Level Digital Production, Design and Development

Digital



T Level Digital Production, Design and Development

Digital



Feedback on implementing diagnostic assessments

Individual learning goals

Begin with a self-diagnostic skills assessment for all new students. Use the assessment outcomes to set individual learning goals. Ensure coordination between curriculum and pastoral staff in setting these goals.

Conducting effective assessments

Include skills-based tasks in the interview process. Try to organise taster days with project activities to evaluate communication and teamwork skills and assign summer tasks focused on enhancing programming skills.

Focus in initial weeks

In the first 6 weeks, conduct several diagnostic assessments covering digital skills and English. Use the assessment results to inform the sequencing and focus areas of the curriculum. Assess English skills, including handwriting, structure and content to identify areas needing support for exam success.

Feedback on sequencing core content

Year 1 sequencing strategy

- Term 1: Focus on delivering core content knowledge.
- Term 2: Apply knowledge through problem solving and projects, incorporating employer input.
- Term 3: Prioritise assessment preparation.

Implementing problem solving and projects

Begin with simple, straightforward projects and gradually increase complexity, leading to more in-depth projects in the second year. Emphasise the importance of scaffolding and sequencing in learning.

Staff responsibilities and structure

Assign specific core content areas to individual staff members, aligning with assessments. Some staff might focus on particular exam paper topics, while others handle skills in projects.

Adapting to assessment schedules

Adjust sequencing to accommodate early exam schedules in May to ensure all core content is delivered in time for revision sessions.

Feedback on embedding skills in the curriculum

Integrating technical skills

Weave technical skills throughout the core content delivery using a problem-solving or project-based approach and involve employers in designing and co-delivering these skills.

Separate technical skills sessions

Consider a separate timetabled session for programming skills to prepare students for industry placements and exposure to multiple programming languages.

Employability skills sessions

Include 'employability skills/professional development' in the curriculum timetable. Try to deliver these sessions through digital curriculum staff or a tutorial to support work readiness for industry placements.

Session delivery methods

Decide between weekly 1-hour sessions or concentrated blocks before the industry placement(s) to focus on developing work readiness and professional skills. Sequence skills sessions throughout the year aligning with assessment dates. Ensure this sequencing aids in optimal preparation for assessments.

Integrating core skills with core content

Blend skills seamlessly into the programme or timetable employer set project sessions. Focus these sessions on assessment task requirements, logistics, and documentation.

Feedback on sequencing occupational specialism (OS) content

Introduction to OS content

Plan to deliver OS content mainly in the second year but introduce some in the first year to build a foundation for Year 2.

Adopting an integrated approach

Incorporate knowledge and skills across the six performance outcomes. Move away from delivering individual performance outcomes discretely due to varying time needs and content overlap.

Project work for OS delivery

Employ project work as the primary method for delivering OS content. Align projects with OS assessment tasks and focus Year 1 projects on working methods and documentation and Year 2 projects on outcomes and quality. Be open to moving to more integrated approaches to avoid content crossover and duplication.

Role-based OS content division

Consider dividing OS content based on specific job roles. Assign each teacher responsibility for content related to different roles like design and analysis, back office, and front office to implement an overarching project encompassing all these roles.

Navigating the assessment schedule

Understand how the OS assessment schedule impacts the macro-sequencing in Year 2. Balance the delivery of OS content with the scheduling of the Industry Placement.

Feedback on implementing industry placements

Industry placement scheduling

Explore different scheduling models: one or two days a week, block placements, or a combination. Consider flexible approaches like route-based, remote/hybrid, or small team projects.

Implementing an effective industry placement approach

Start with an initial block placement after core assessments. Use route-based placements to avoid conflicting with core assessments. Schedule a second placement phase in Year 2 for two days a week with a different employer, integrating with Occupational Specialism content.

Block industry placement strategy

Plan a series of three shorter block placements, incorporating holiday weeks. Communicate this plan clearly during the recruitment process. Ensure the approach is suitable for students and employers, facilitating project completion.

Maintaining flexibility in industry placements

Be adaptable to different student and employer schedules. Allow for varied placement timings and methods among students. Adjust Year 2 curriculum content delivery to accommodate this flexibility.

Post-OS assessment for industry placements

Schedule placements after the occupational specialism assessments, typically in May and June of Year 2. Leverage the higher skill and maturity levels of students for potential progression opportunities with employers.

Further information on T-levels

- Technical Qualification in Digital Production, Design and Development (Version 1.3 - April 2023)
- Guidance on effective practice in curriculum planning (January 2023)
- Guidance on T Level Industry Placement Delivery (June 2023)