

Training Overview



Welcome to the
ICBE Advanced Productivity Skillnet
Data Analytics Start Your Journey Level 1

*You may be contacted regarding this training by an external evaluator in the future

ICBE Business Excellence Skillnet is co-funded by Skillnet Ireland and member companies. Skillnet Ireland is funded from the National Training Fund through the Department of Education and Skills.



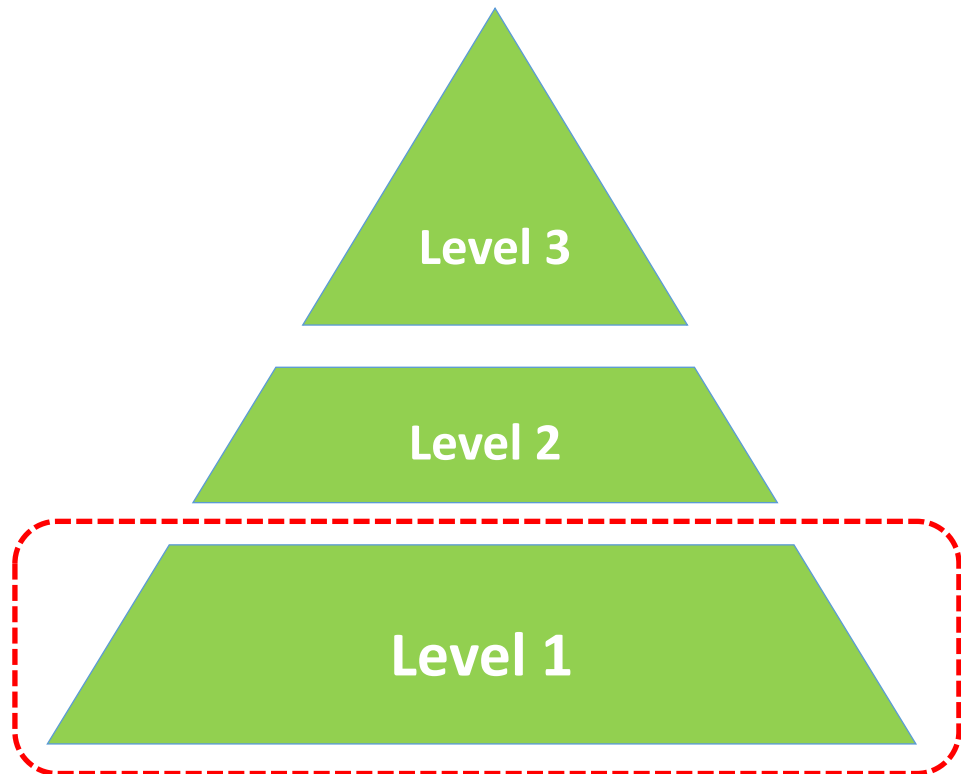
An Roinn Oideachais
agus Scileanna
Department of
Education and Skills



Data Analytics Program Overview

- Advanced Productivity Skillnet Overall Program Goal

To help increase the overall data literacy and analytics maturity of people across the organisation to enable them capitalise on the strategic and financial benefits in leveraging what the newer data analytics technologies have to offer.



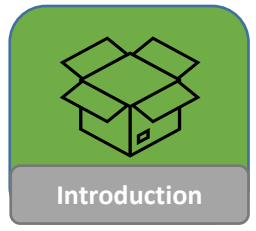
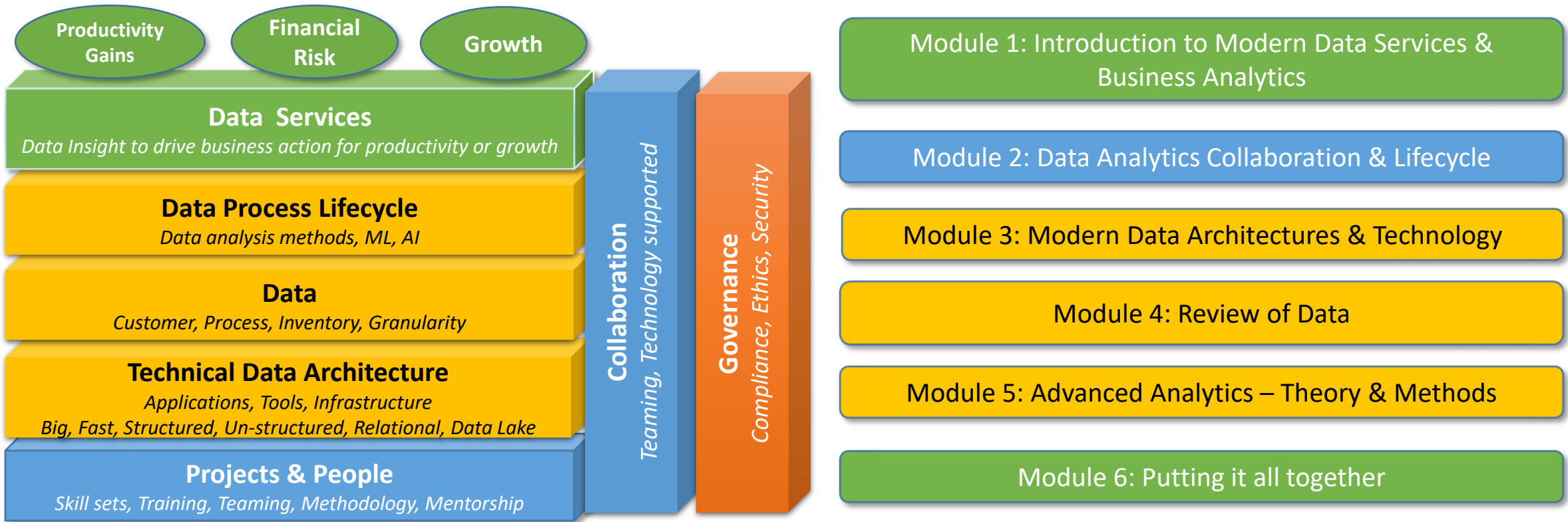
Level 3: Master Level: Advanced analytics use cases, mentoring of other analytics projects

Level 2: Practitioner Level: Use of Level 1 learning with company team and data

Level 1: Alignment and Understanding: Overview of Data Literacy Framework model with exercises in Power BI

Advanced Productivity Lecture Structure Overview – Level 1

(Alignment and understanding)



Advanced Productivity Analytics Training Structure Detail Overview

Intro to Data Business	Collaboration & Lifecycle	Modern Data Architectures [Acquire Data]	Review of Data [Structure Data]	Advanced Analytics [Analyse Data]	Bringing it all together [Present Data]
<p>Organisation departments showing greatest value</p> <p>Modern Data Analytics Use Case approaches</p> <p>Vertical Market Support function use cases</p> <p>Use Case Focus in the data analytics industry</p> <p>What sets the leaders apart</p> <p>Who owns the key questions to address</p>	<p>Data Analytics Delivery Lifecycles</p> <p>Data Analytics Team Skills</p> <p>Team Collaboration</p> <p>Structuring the project</p> <p>Sample Analytics Plans</p> <p>The Analytics Workshop with Synectic brainstorming</p> <p>Design thinking vs data science</p> <p>Workshop lessons learned</p> <p>Use Case example projects</p>	<p>Data at scale</p> <p>Classic Data Systems of Record, ERP, CRM, HCM, ITSM</p> <p>Systems of Intelligence , Analytics Sandboxes, Data warehouses and Data Lakes</p> <p>Systems of engagement, web, mobile, chat</p> <p>Analytic Layer and Data Layer architectures</p> <p>Private, Public, Hybrid cloud</p> <p>Data Virtualisation and Data Integrity with validated systems</p> <p>Integrated & vertically focused No Code / Low Code analytics platforms</p>	<p>Business to Data Understanding</p> <p>Assessing Data Quality</p> <p>Understanding Bias, Variance</p> <p>Descriptive Analytics and initial statistical investigative techniques</p> <p>No Code / Low Code data visualisation tools standard functionality</p> <p>Overview of Analytics Tool analytics functionality</p> <ul style="list-style-type: none"> • Data Import • Entities, Tables, Joins and views, ABT's • Data Types • Data Visualisations and Dashboards 	<p>Intro to mathematical modelling</p> <p>Business Question to model mapping</p> <p>Advanced techniques</p> <ul style="list-style-type: none"> • Clustering • Classification • Regression • Time series <p>Generative AI</p>	<p>Assessing algorithmic performance</p> <p>Presenting to the project sponsor</p> <p>Pilot / Production Go / No Go.</p> <p>Analytics at a point and place in time</p> <p>Next analytics use case</p>

Weeks 1 to 4 Timetable Overview – Level 1



Mon	Tues	Weds	Thurs	Fri
Intro @11AM	Lecture2 @11AM	Lecture3 @11AM	Lecture4 @11AM	
Lecture1 @2PM	Breakout 1 @2PM	Breakout 2 @2PM	Breakout 3 @2PM	

- 60 Minute lecture
- 60 Minute lecture
- 90 Minute lecture
- 60 Minute Breakout
- Estimate 9 hours student time

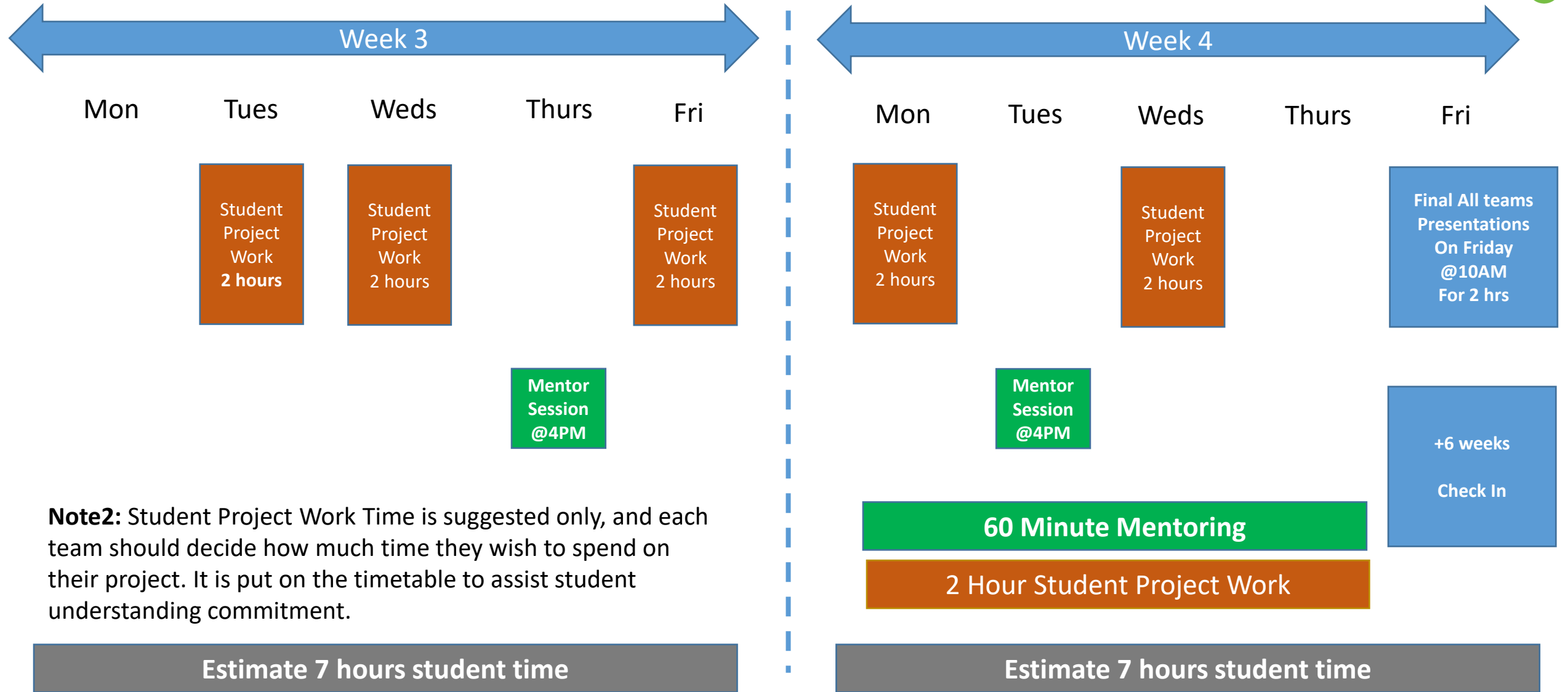


Mon	Tues	Weds	Thurs	Fri
Lecture 5 @11AM	Lecture 6 @11AM	Student Project Work 2 hours		
Breakout 4 @2PM	Breakout 5 @2PM	Optional Lecture 7 @2PM	Mentor Session @4PM	

- 90 Minute lecture
- 60 Minute lecture
- 60 Minute Breakout
- 60 Minute Mentoring
- 2 Hour Student Project Work
- Estimate 8 hours student effort
- Optional Lecture 7 @2PM
- Optional lecture on latest trends in analytics technology

Note1: Mentoring sessions are at a class level. Questions should be related to the practice projects

Weeks 1 to 4 Timetable Overview – Level 1



Note2: Student Project Work Time is suggested only, and each team should decide how much time they wish to spend on their project. It is put on the timetable to assist student understanding commitment.

60 Minute Mentoring

2 Hour Student Project Work

Sample Training Course Feedback

As a participant, the course provided me with very substantial insights and a sense of accomplishment. It was great to learn the concepts and apply the learnings through a mini data analytics project. – Participant, Viatris

It was a pleasure to attend the course. Hosts were fantastic and Dave really is brilliant and makes it so interesting and accessible in spite of the subject being so vast. We really got some invaluable tips to set us on our data analysis way – Participant, Bausch & Lomb

I think this blended approach of learning (theory and practical work) is a brilliant way to support learning and the course had the right level of each to compliment each other. It was a very well-constructed course and a great introduction to analytics. Thank you – Participant, Lilly

It is a great course to start one's data analytics journey and it was well delivered by Dave Clarke and Helen Clarke. Thanks to you both for an enjoyable few weeks. Participant, Cook Medical

The delivery style, checking in with participants & real world examples of the data application were very helpful. Showcasing how Data is used in industry helps to bring the subject to life and provides context. Having classes recorded is helpful and allows you to actively listen rather than taking notes. – Participant, Zimmer Biomet