# AI Assisted Programming (AIAP)

**Introduction**

# Welcome back!

# Contact Information

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# Enrol in Module on Moodle

- Go to https://vlegalwaymayo.atu.ie/
- Search for course **10720** and click on **AI ASSISTED PROGRAMMING**.
- This class is split into 3 groups (i.e., A, B and C). Find out what group you are in.
- Click on Enrol button
  - If you are in **Group A** enrol using password: *group**a***
  - If you are in **Group B** enrol using password: *group**b***
  - If you are in **Group C** enrol using password: *group**c***

# Duration and Contact Time

- 13 Weeks
- This is week 1
- No lab week 1
- Usual week has a 1 hour of lecture and a 2 hour lab for each group
- Timetable: https://timetables.atu.ie/

# Module Learning Outcomes

**AI Assisted Programming:**

1. Identify and evaluate the capabilities of various AI powered coding tools, including code generation, code completion, and debugging assistants.
2. Integrate AI based tools into a practical software development workflow, demonstrating their use in real-world coding scenarios.
3. Critically analyse the benefits and limitations of AI coding assistance, considering issues of code quality, over-reliance, and potential biases.
4. Explore emerging trends in the field of AI-assisted programming.

# Syllabus

- You will find a live syllabus at the top of the module Moodle page.

# Assessment Matrix

| Week Due | Assessment Type | Grade Portion |
|---|---|---|
| 7 | MCQ1 | 30% |
| 12 | MCQ2 | 30% |
| 13 | Project | 40% |

# Assessments Overview

- **MCQ1** and **MCQ2** will be multiple choice questions taken from Lectures and Labs from previous weeks.
- If you want to test yourself, read over the materials and then upload them to Google NotebookLM and ask it to generate some sample MCQ questions for you.
- The **Project** will be an application written in a language of you choice and you maybe use the AI tools for your choice to assist in writing it. Each application must incorporate some AI technology (e.g. image generation) and follow the instructions in the project brief.

# Contact me

- Email

# Effort Required

- This is a 5-credit module.
- Required 100 - 125 hours of work over 13 weeks.
- Self-directed learning will be main source of learning.

# External Resources

**AI**

# Tools

- GitHub – Repo storage
- Codespaces – Free VM in the cloud accessible via a browser
- GitHub Copilot – AI assisted programming
- CLI Code tools.

# To Do

- Sign up for **GitHub Student Developer Pack**
- Change your GitHub username to your actual name.


ANY
QUESTIONS
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