

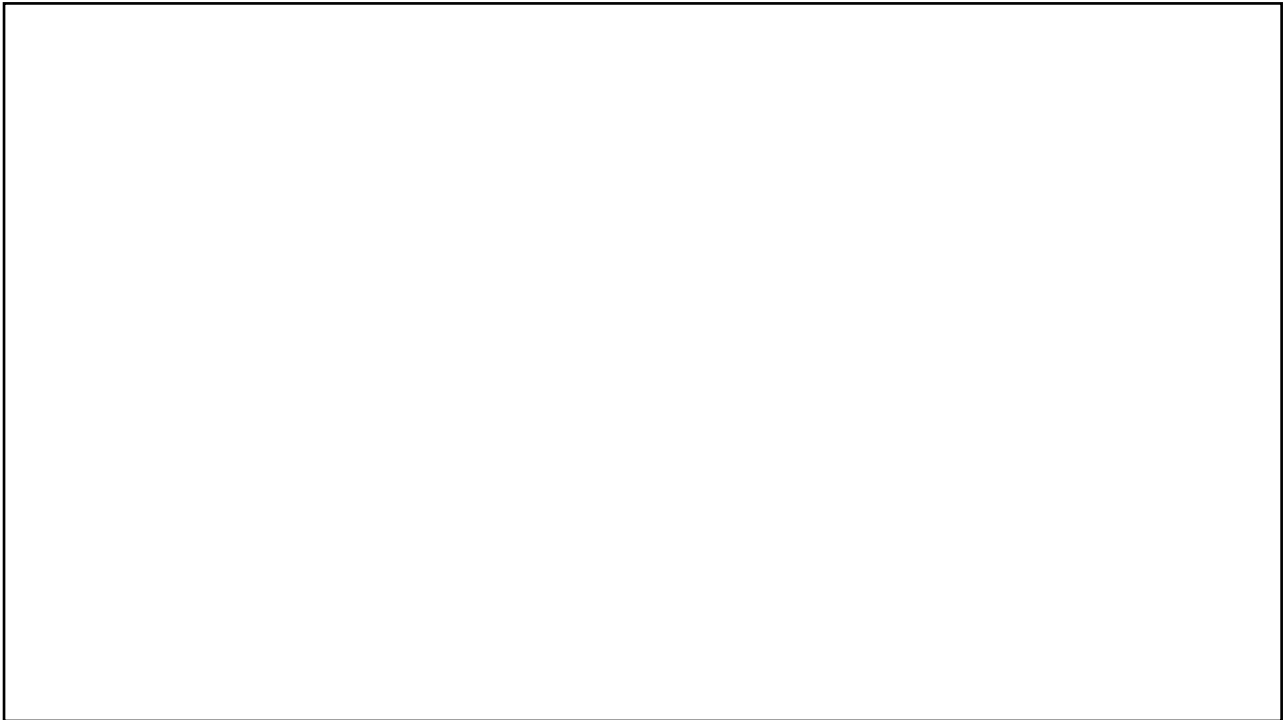
MSc Project modules

- 7COM1036 Artificial Intelligence with Robotics Masters Project
- 7COM1037 Computer Networking Principles and Practice Masters Project
- 7COM1038 Software Engineering Masters Project
- 7COM1039 Advanced Computer Science Masters Project
- 7COM1040 Computer Science Masters Project
- 7COM1070 Cyber Security Masters Project
- 7COM1075 Data Science and Analytics Masters Project
- 7COM1077 Computer Networks and Systems Security Masters Project
- 7COM1086 Artificial Intelligence and Robotics Masters Project

**University of
Hertfordshire UH**

School of Physics,
Engineering and
Computer Science

Getting started on your project
and how it is assessed



Introduction to your Masters Project

- Familiarise you with the module
- Identify how to get started
- Plan and plan and plan ahead...

What is 'the project'?

- An **individual** piece of work
 - not an assignment set by the tutor
- Carried out over an extended period of time
 - For one-semester projects: approx. 600 hours over 14 weeks → 43 hours/week (or more if you don't work during the vocation)
 - For double-semester projects: more weeks (about 27) but still need to work about 22 hours every week (or more if you don't work during the vocation)
- **Not** something you can leave to the last few weeks
- **Not** just a piece of software development
- **Not** a report on stuff you have found on the web or in books

PLAN AHEAD!

What sort of project?

- There are EIGHT/Nine different project modules
 - 7COM1036 Artificial Intelligence with Robotics Masters Project
 - 7COM1037 Computer Networking Principles and Practice Masters Project
 - 7COM1038 Software Engineering Masters Project
 - 7COM1039 Advanced Computer Science Masters Project
 - 7COM1040 Computer Science Masters Project
 - 7COM1070 Cyber Security Masters Project
 - 7COM1075 Data Science and Analytics Masters Project
 - 7COM1077 Computer Networks and Systems Security Masters Project
 - 7COM1086 Artificial Intelligence and Robotics Masters Project
- But only TWO really different kinds of project
 - Investigative
 - Development

You have to do the type of project specified by the award you seek

Investigative project

- For Software Engineering, AI, Robotics, Data Science, Networking, Cyber Security or Advanced CS, a programme of investigative and practical work.
- You need to have a **research question** or **hypothesis** to investigate.

See chapter 1 of the recommended textbook for a study of what this means - and attempt the action points at the end of the chapter

Investigative project learning outcomes

1. be able to critically evaluate advanced literature in topics relevant to their chosen project.
2. be able to combine their knowledge of the subject, their reading of research papers and the outcome of their own investigations to conceive original ideas of their own.

Networking project learning outcomes

- be able to select and use appropriate techniques and tools employed in computer networking, distributed systems, and system security in order to conduct a practical investigation into a particular distributed systems or system security problem.

SE project learning outcomes

- be able to select and use appropriate software engineering models, methodologies, measures and tools in order to conduct a practical investigation or solve a particular software engineering problem

Advanced CS project learning outcomes

- be able to select and use appropriate techniques and tools employed in computer science in order to conduct a practical investigation of a particular advanced computer science problem

Cyber Security project learning outcomes

- be able to select and use appropriate techniques and tools employed in cyber security in order to conduct a practical investigation into a particular cyber security problem

Computer Networks and Systems Security

- be able to select and use appropriate techniques and tools employed in computer networking, distributed systems, and system security in order to conduct a practical investigation into a particular distributed systems or system security problem

Data Science and Analytics project learning outcomes

- be able to select and use appropriate techniques and tools employed in data science and analytics in order to conduct a practical investigation into a particular data science and analytics problem

AI/Robotics project learning outcomes

- be able to undertake a practical piece of work that demonstrates that they can apply their knowledge and skills to the design and development of computerised solutions to a particular problem within the domain of computer science

Development project

- If you are on the “crossover” award, the requirements are significantly different.

Development project learning outcomes

1. be able to demonstrate a deep understanding of different approaches to modelling, design and programming;
2. show how these approaches might affect the nature of solutions to computational problems and critically evaluate their deployment in appropriate contexts.
3. be able to refer to the findings of other academic writers to justify their chosen approach to the development of a solution, and to evaluate the outcomes of their project work.
4. be able to undertake a practical piece of work that demonstrates that they can apply their knowledge and skills to the design and development of complex computerised solutions to a particular problem within the domain of computer science.

Learning outcomes for **ALL** students

- be able to plan and manage a substantial body of work, identify any risks inherent in their chosen approach, and work independently with minimum supervision;
- be able to both critically evaluate and articulate the outcome of their project work in written and oral form;
- be able to articulate the broader contexts of their work in relation to legal, social, ethical, and professional issues, and assess the economic impact of their project.

Your participation

- You need to be working full-time on your project
 - **43-55 hours a week for one-semester projects, or**
 - **22-25 hours a week for double-semester projects**
- Please avoid taking leave or “going on holiday”
- If you are absent, then make arrangements with your tutor and adjust your schedule

Keep in touch and keep up!

Questions about supervisors

- Advise the module leader if you’ve made arrangements with a supervisor or we will assign you to a supervisor.
- Your supervisor will typically have regular meeting with you during the term time:
 - Every week (for one-semester projects),
 - every other week (for double-semester projects),
 - but there are variances
- Supervisors may take some annual leave during your project.

What happens next?

- Look at the project ideas on Canvas (published)
 - Remember they are only suggestions!
- Bring your own ideas forward
- Regularly visit Canvas module site
- Attend the next session!

Need more guidance?

- Read chapters 1, 2, 3 and 5 of the recommended textbook
 - Attempt action points in 1.7
- Choose a topic area
 - Something you are REALLY interested in
- Attempt the second action point in 2.8 and the first one in 3.7
- Start work on a project proposal
- Develop plans for a literature review by attempting the first two action points in 5.9