

THE UNIVERSITY OF MELBOURNE
SCHOOL OF COMPUTING AND INFORMATION SYSTEMS
MASTER OF INFORMATION TECHNOLOGY PROJECTS (WITH AN FAQ)

Master of IT projects: New structure

From 2020 semester 1, the structure of projects in the Master of Information Technology is changing. The projects that students can do remain the same (software development project, research project, or innovation project), but the way these are administered as subjects will change.

Computing, Distributed Computing, Cybersecurity, and AI streams

For students in the *Computing*, *Distributed Computing*, *Cybersecurity*, and *Artificial Intelligence* streams (no more than 75 points short of completion), there are three types of projects:

COMP90082 Software Project. The software project is intended for people who plan to work in a software development role (or similar) after graduation; that is, working in a organisation as a part of a team developing software to solve problems. These projects will be done in small teams of 3-4 people, under the guidance of a supervisor, providing valuable experience and improved software development skills. These include technical skills of software development such as design, programming, and communication. The project will provide students with the opportunity to use tools required in contemporary software projects, such as version control and project tracking. COMP90082 should be the default pathway for most students, as this is excellent preparation for a first role after graduation.

COMP90055 Research Project. The research project is intended for people who are planning a research career, in particular, those who plan to continue on to further study, such as a PhD or masters by research. These projects will be done either individually or in small teams (depending on the preferences of the supervisor), providing valuable experience in how to conduct a research project in information technology. Skills developed include summary (literature reviews), critical thinking, research methodology, evaluation, and writing. This should be the pathway only for students intending to do further study. To enrol in a research project, students should have a WAM of 75 or greater, and have agreement from a supervisor to supervise their project.

INFO90010 Technology Innovation Project. The innovation project is for people who are interested in innovation, either as an entrepreneur wanting to start their own business, or as a “intreprenuer” wanting to innovate within another organisation. Projects will be done in small teams of 3-4 people, under the guidance of a mentor, providing valuable experience in the process of innovation, including problem discovery, ideation, and evaluation. Part of this project will involve finding and talking to people to learn about real problems. This should be the pathway only for students with a serious interest in innovation, and with a willingness to take on projects with unclear boundaries. To apply for enrolment in the innovation project, students should have a WAM of 70 or greater. Enrolment into the subject is selective based on a short application.

Human-Computer Interaction stream

Students in the *HCI* stream must enrol in INFO90008 HCI Project. This project provides valuable experience problem solving and communication skills. Under the supervision and guidance of an academic researcher, students are required to design and conduct a research investigation. This typically involves a literature review, experimentation and data collection, and data analysis.

Spatial stream

Students in the *Spatial* stream must enrol in GEOM90043 Spatial IT Project. This project provides valuable experience problem solving and communication skills. Under the supervision and guidance of an academic researcher, students undertake a research-based project.

FAQ for Master of Information Technology projects

Q. How early in my course can I complete my mandatory 25-point project subject?

A. You can enrol in COMP90082 when you are no more than 75 points short of completion. The same goes for COMP90055, except you must also have a WAM of 75 or more. For INFO90010, you will need a WAM of 70 or more. For INFO90008 the prerequisites are a little different; see the Handbook entry for the subject.

Q. Can I freely choose which 25-point project subject to take?

A. No, your project subject is prescribed by the Handbook. If you are in the *HCI* stream, the subject is INFO90008. If you are in the *Spatial* stream, the subject is GEOM90043. Otherwise your standard capstone subject is COMP90082. If you qualify for INFO90010 Technology Innovation Project, you can apply for an enrolment variation and do that instead of COMP90082. If you qualify for COMP90055 Research Project, you can apply for an enrolment variation and choose COMP90055 instead of COMP90082.

There is one additional hurdle: To take COMP90055, you will need to find a project that is relevant to your Master of IT specialisation, and a supervisor. The Project Coordinator for your stream will guide you.

Q. Will I need a project supervisor, and if so, how do I arrange that?

A. If you are enrolled in COMP90082 or INFO90010, you will be working on a team-based project, and a supervisor will be allocated to the team. If you are enrolled in COMP90055, INFO90008, or GEOM90043, you will need to find a research topic and an academic who is willing to supervise. The supervisor can be an academic staff member in CIS or in Geomatics, including research-only staff. Finding a supervisor may require a bit of time, so you are encouraged to start your search early.

Q. Are lists of research project ideas and supervisors available?

A. Yes. To find academics with an interest in your research area, check out staff home pages, or perhaps Find an Expert, <https://www.findanexpert.unimelb.edu.au/>. Also have a look at the list of projects at <https://apps2.eng.unimelb.edu.au/cis-projects> (if you are in the *HCI* stream: <https://cis.unimelb.edu.au/interaction-design/masters-projects/>). These lists can give you some idea of research interests in the School and help you locate staff with the research expertise that is relevant to you.

Q. If I am doing a research project, when should I settle on a project topic?

A. If you are enrolled in COMP90055, INFO90008, or GEOM90043, you really should have your research topic sorted out well before the semester starts, including having somebody who agrees to supervise. Your research project should be registered by the end of Week 1, and your detailed research proposal (800–1000 words) must be submitted to your supervisor by the end of Week 2.

Q. What do you mean by “register”? How do I register my project?

A. Around semester start, you will be pointed to an online form to complete.

Q. Can I fit several of the 25-point project subjects into my study plan?

A. No, in general that is not possible. You will need to consult the Handbook to see if there are exceptions. If you are in the *HCI* stream, then the 25-point INFO90009 HCI Project (Advanced) is a possible elective, provided you have obtained a mark of 75 or more in INFO90008. All questions about course requirements and your study plan should go to your Master of IT Stream Coordinator (see below).

Q. As a Master of IT student, can I do the 25-point project over summer?

A. COMP90082 Software Project, INFO90008 HCI Project, and INFO90010 Technology Innovation Project are offered in semesters 1 and 2 only. For COMP90055 and GEOM90043, the answer is yes, provided you are able to find a supervisor. Note that it can be difficult to find supervision for the summer term, because most academics will take their annual leave and/or spend time at conferences.

If you contemplate a summer research project, you should sort that out in good time, and have a Plan B ready if supervision turns out to be unavailable.

Q. What happened to COMP90019 Distributed Computing Project?

A. COMP90019 has been folded into COMP90055. Students in the *Distributed Computing* stream can, if they want, and provided they qualify for the research project, take the subject over summer (unlike previous years). Note, however, that this still assumes you are able to find a supervisor, which may not be the case.

Q. Are there special arrangements in place going into 2020?

A. Yes, we will treat the summer term according to the 2019 Handbook rules. COMP90055 will be open to Master of IT students in the *Computing, Distributed Computing, Cybersecurity, and Artificial Intelligence* streams.

Q. I have successfully enrolled into my 25-point project subject, but it has not started yet—what happens next?

A. If you are enrolled in COMP90082, INFO90008, or INFO90010, consult the LMS page for your subject. If you are enrolled in COMP90055 or GEOM90043 in semester 1 or 2, you will, after a short period, be enrolled (automatically) in an LMS “Learning Community”. We use this Learning Community for communication across several research project subjects. The Learning Community is where you will receive further information about deadlines, and instructions for how to register (confirm) your project. If you are enrolled over summer, we don’t have a need for the Learning Community, and communication then happens via the COMP90055 or GEOM90043 LMS site.

Q. I have successfully enrolled and also completed the online registration of my project. Now I am set to go, right?

A. Yes, and you should arrange to meet with your supervisor as soon as possible. Also, keep in mind that your Stream Coordinator reserves the right to check that your project is relevant to your Master of IT specialisation. If your project topic is mis-directed, the Stream Coordinator can insist, before the end of Week 2, that you find a better project.

Q. If I have a question that has not been answered in this FAQ, where do I go?

A. It depends on the question. If it is about enrolment variation, course advice or your study plan, contact your Stream Coordinator:

- Computing: Artem Polyvyanyy, artem.polyvyanyy@unimelb.edu.au
- Distributed Computing: Eduardo Oliveira, eduardo.oliveira@unimelb.edu.au
- AI: Kris Ehinger, kris.ehinger@unimelb.edu.au
- Cybersecurity: Toby Murray, toby.murray@unimelb.edu.au
- HCI: Jorge Goncalves, jorge.goncalves@unimelb.edu.au
- Spatial: Stephan Winter, winter@unimelb.edu.au

If it is about a potential project and you want to check whether the topic is acceptable for your particular Master of IT specialisation, contact the Project Coordinator for your stream:

- Computing: Peter Schachte, schachte@unimelb.edu.au
- Distributed Computing: Farhana Choudhury, farhana.choudhury@unimelb.edu.au
- AI: Nir Lipovetzky, nir.lipovetzky@unimelb.edu.au
- Cybersecurity: Atif Ahmad, atif@unimelb.edu.au
- HCI: Melissa Rogerson, melissa.rogerson@unimelb.edu.au
- Spatial: Stephan Winter, winter@unimelb.edu.au

If it is directly subject related, contact the relevant subject coordinator:

- COMP90055: Peter Schachte, schachte@unimelb.edu.au
- COMP90082: Leon Sterling, leonss@unimelb.edu.au
- INFO90008: Jorge Goncalves, jorge.goncalves@unimelb.edu.au
- INFO90010: Gil Tidhar, gtidhar@unimelb.edu.au
- GEOM90043: Stephan Winter, winter@unimelb.edu.au