

CH985-70 MSc Research Project

26/27

Department

Chemistry

Level

Taught Postgraduate Level

Module leader

Martin Wills

Credit value

70

Module duration

20 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

Twenty-week individual project including approximately 4 weeks write up, carrying out research on a specialised topic in Chemistry or a closely related subject under the direction of an academic or industrial supervisor and their team.

Module aims

The module is designed to develop student research skills, through an extended project in an area of chosen discipline. Students will become aware of the elements of research, including appraising the literature, designing novel experiments (practical and/or computational), assessing results and drawing conclusions that they will be able to set against the current field. This module will allow students to be original in their application of knowledge to the solution of new, research-led problems. The philosophy of the Chemistry MSc degrees is to provide a student experience and training which brings them to the state of the art in the field of analytical science or polymer chemistry. The Research Project module is thus a key component of the course, since it provides students with the opportunity to carry out a research project under the supervision of an academic or a researcher from industry. Students are given guidance from the supervisor, and have the opportunity to design and plan their own research work and assess the safety implications of their proposed research. Students will be expected to present a 10,000-word report which should be at the standard of a research paper. They also present their work in the form of a seminar and poster

to the rest of the cohort and other academics. This forms part of the assessment of the project. During this session, students face questions from their peers and academics. These activities allow students to develop presentation and communication skills.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Research project

Twenty-week project including approximately 4 weeks write up, carrying out research on a specialised topic in chemistry or a closely related field under the direction of an academic or industrial supervisor and their team.

Presentations and assessment

Presentation of the research project as a 10,000-word report which should be at the standard of a research paper, seminar talk and a presentation of the interim results during a student conference in a form of a poster.

Learning outcomes

By the end of the module, students should be able to:

- Complete individual COSHH assessments for a diverse range of experiments (where applicable)
- Understand and be aware of current research and problems relating to the area of the research project. To be able to critically evaluate the literature and identify the most important body of work.
- Plan experiments and carry out appropriate analyses.
- Present to peers a critical evaluation of their research work and to be able to defend their work to an audience of peers.
- Write a high quality report at research level including an appraisal of the literature, experimental methods, results and discussion, conclusions

Research element

Twenty-week individual project including approximately 4 weeks write up, carrying out research on a specialised topic in chemistry or a closely related subject under the direction of an academic or industrial supervisor and their team.

Subject specific skills

The module is designed to develop student research skills, through an extended project in an area of chosen discipline. Students will become aware of the elements of research, including appraising the literature, designing novel experiments (practical and/or computational), assessing results and drawing conclusions that they will be able to set against the current field. This module will allow students to be original in their application of knowledge to the solution of new, research-led

problems.

Transferable skills

Critical thinking, Problem solving, Communication, Teamwork and working effectively with others, Information literacy (research skills), Digital literacy, Professionalism

Study

Study time

Type	Required
Project supervision	20 sessions of 2 hours (8%)
Other activity	480 hours (92%)
Total	520 hours

Private study description

No private study requirements defined for this module.

Other activity description

Individual research project work: 16-weeks at a notional average of 30 hours per week (480 hours total) under the direction of a research supervisor.

Costs

No further costs have been identified for this module.

Assessment

You must pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time	Eligible for self-certification
Assessment component			
Project Report	70%	120 hours	No

	Weighting	Study time	Eligible for self-certification
A 10,000-word project thesis.			
Reassessment component is the same			
Assessment component			
Assessment of Execution	10%		No
Supervisor mark for execution of research			

Reassessment component is the same

Assessment component

Presentation and Poster	20%	60 hours	No
Poster and presentation			

Reassessment component is the same

Feedback on assessment

Written work will be marked and feedback (usually written) will be given. Seminar and the poster will have verbal feedback.

Availability

Courses

This module is Core for:

- Year 1 of TCHA-F1PY Postgraduate Taught Analytical Science and Instrumentation
- Year 1 of TCHA-F1PX Postgraduate Taught Analytical and Polymer Science
- Year 1 of TCHS-F1PK Postgraduate Taught Polymer Chemistry
- TCHA-F1PW Postgraduate Taught Polymer Science
 - Year 1 of F1PW Polymer Science
 - Year 2 of F1PW Polymer Science

This module is Unusual option for:

- Year 3 of TCHA-F1PW Postgraduate Taught Polymer Science

This module is Core option list B for:

- Year 1 of TCHA-F1PY Postgraduate Taught Analytical Science and Instrumentation