Xi'an Jiaotong-Liverpool University
西交利物浦大學

School of Advanced Technology

MODULE HANDBOOK

SAT406
MSc Dissertation Project

Jie Zhang

Semester 1

2021-2022

SECTION A: Basic Information

- **Brief Introduction to the Module**

In this module, students will carry out an individual project under the supervision of a member of academic staff. They will report findings both verbally and in writing. This module is an opportunity for students to carry out a guided but in-depth and independent piece of work on an important problem by making appropriate use of skills and methodologies learnt elsewhere in the programme.

- **Key Module Information**

Module Title	MSc Dissertation Project
Module Code	SAT406
Originating Department	School of Advanced Technology
Module Level	Master/Level 4 (FHEQ Level 7)
Module Credits *(normally 5)*	20
Pre-requisites *(including Year 1)*	
Shared Programme(s) *(please name all)*	MSc Multimedia Telecommunications MSc Sustainable Energy Technology MSc Applied Informatics MSc Financial Computing MSc Social Computing

- **Delivery Schedule**

	Lectures	**Seminars**	**Tutorials**	**Lab / Practicals**	**Fieldwork / Placement**	**Other** *(Private study)*	**Total**
Hours / Semester		2	13			585	600
Delivery Pattern		2*1*1	1*1*13				

- **Module Leader and Contact Details**

Name: *Jie Zhang*

Email address: *jie.zhang01@xjtlu.edu.cn*

Telephone extension number: *x7754*

Room number: *EE522*

Preferred means of contact: *email*

- **Additional Teaching Staff and Contact Details**

Your project supervisor will be your main point of contact. For module issues not related to your project content please contact the module leader as per the above details.

SECTION B: What you can expect from the module

- **Educational Aims of the Module**

Students will carry out an individual project under the supervision of a member of academic staff. They will report findings both verbally and in writing. The purpose of the project is as follows.

- To provide students with the opportunity to plan, carry out and control a research project at the forefront of their academic discipline, field of study or area of professional practice.
- To prepare students for research or investigative work as a professional engineer or computer scientist.
- To enable students to gain a comprehensive understanding of the techniques applicable to research.
- To make an original contribution to knowledge.

The dissertation must provide evidence of the following.

- An in-depth understanding of the subject area chosen for the dissertation.
- A mastery of research techniques relevant to the topic area.
- The ability to collect and analyse empirical data.
- The ability to evaluate project outcomes.

- **Learning Outcomes**

A. Demonstrate a critical awareness and understanding of the relevant scientific literature associated with the project;
B. Understand all aspects of working as an engineer or computer scientist in the planning, design and execution of academic or technical activities to solve specific problems;
C. Master necessary intellectual abilities to define a problem, gather and evaluate research information, manage risks, analyse data and propose new technologies;
D. Have the practical skills to be able to use appropriate analysis software, IT tools or research equipment necessary to carry out relevant experimental, laboratory, or workshop activities;
E. Effectively communicate project work and findings through a formal presentation and/or structured dissertation thesis;
F. Understand and participate in the legal, social, ethical and professional framework in systems, software or information engineering.

- **Assessment Details**[1]

Initial Assessment

Sequence	Method	Assessment EXAM or CW	Learning Outcomes Assessed	Duration	Week	% of Final Mark	Resit (Y/N/S)
1	Project Specification	CW	ACF			10	S
2	Oral Presentation	CW	ABCEF			20	S
3	Thesis	CW	ALL			70	S

Resit Assessment

Assessment Type (EXAM or CW)	Learning Outcomes Assessed *(use codes under Learning Outcomes)*	Duration	Week	% of Final Mark
CW	ALL			100

The resit assessment will assess all of the learning outcomes of the module, and will be weighted as 100% of the final module mark. Other components of the assessment, regardless of whether or not the student passed or failed, will not be included in the calculation of the final module mark, following resit assessment.

- **Methods of Learning and Teaching**

Regular meetings/consultations with supervisor; laboratory and other investigative work under direct/indirect supervision (as appropriate); preparation of project specification and final thesis, poster or web-page and oral presentation.

- **Syllabus & Teaching Plan**

Students are provided with a list of research projects related to the research currently undertaken by staff members and are free to make their choice according to their specific needs or interests.

Over the course of this module, students are required to perform the following tasks:

- Perform literature survey of their chosen research topic.
- Perform research activity according to the agreed plan.
- Formulate a project plan with clear aims, objectives and expected outcomes as well as a project timeline
- Perform oral presentation with assessment panels.
- Submit a final thesis.

[1] For details of marking criteria, please refer to Appendix A, B, and C.

SECTION C: Additional Information

- **Student Feedback**

  The University is keen to elicit student feedback to make improvements for each module in every session. It is the University policy that the preferred way of achieving this is by means of an Online Module Evaluation Questionnaire Survey. Students will be invited to complete the questionnaire survey for this module at the end of the semester.

  You are strongly advised to read the policies mentioned below very carefully, which will help you better perform in your academic studies. All the policies and regulations related to your academic study can be found in 'Student Academic Services' section under the heading "Policies and Regulations" on E-bridge.

- **Plagiarism, Cheating, and Fabrication of Data.**

  Offences of this type can result in attendance at a University-level committee and penalties being imposed. You need to be familiar with the rules. Please see the "Academic Integrity Policy" available on e-Bridge in the 'Student Academic Services' section under the heading 'Policies and Regulations'.

- **Rules of submission for assessed coursework**

  The University has detailed rules and procedures governing the submission of assessed coursework. You need to be familiar with them. Details can be found in the "Code of Practice for Assessment" available on e-Bridge in the 'Student Academic Services' section under the heading 'Policies and Regulations'.

- **Late Submission of Assessed Coursework**

  The University attaches penalties to the late submission of assessed coursework. You need to be familiar with the University's rules. Details can be found in the "Code of Practice for Assessment" available on e-Bridge in the 'Student Academic Services' section under the heading 'Policies and Regulations'.

- **Mitigating Circumstances**

  The University is able to take into account mitigating circumstances, such as illness or personal circumstances which may have adversely affected student performance on a module. It is the student's responsibility to keep their Academic Advisor, Programme Director, or Head of Department informed of illness and other factors affecting their progress during the year and especially during the examination period. Students who believe that their performance on an examination or assessed coursework may have been impaired by illness, or other exceptional circumstances should follow the procedures set out in the "Mitigating

Circumstances Policy", which can be found on e-Bridge in the 'Student Academic Services' section under the heading 'Policies and Regulations'.

- **Learning Mall Online**
  Copies of notes or other materials are available electronically through LMO, the University's virtual learning environment.

Appendix A: Project Specification (Weighting: 10%)

Marker Name	

Marking Details

Marking Criteria	**Item**	**Marks Awarded**
Project Specification (70)	Problem statement	
	Aims and objectives	
	Project Plan	
	Expected Outcomes	
Quality of report (30)	References and citations	
	Coherence, fluency, succinctness	
	Presentation	
Total		
Comments		

Appendix B: Oral Presentation (Weighting: 20%)

Marker Name	

Marking Details

Marking Criteria	**Item**	**Marks Awarded**
Content (40)	Understanding of the topic area	
	Coverage	
	Originality	
Presentation Skills (20)	Clarity	
	Presentation materials	
	Organisation	
	Timing	
Questions and Answers (40)	Comprehension	
	Engagement in critical discourse	
	Depth of understanding	
Total		
Comments		

Appendix C: Thesis (Weighting: 70%)

Marker Name	

Marking Details

Marking Criteria	**Item**	**Marks Awarded**
Specification and design (20)	Understanding of the project	
	Aims and objectives	
	Literature review	
	Risk analysis	
Design and Implementation (40)	Project design	
	Implementation	
	Testing	
	Evaluation	
	Critical analysis	
Conclusion (20)	Discussion	
	Critical reflection (scope, contribution etc.)	
	Future Work	
	Professional and personal development	
Quality of report (20)	References and citations	
	Structure	
	Coverage	
	Coherence, Fluency, Succinctness	
	Presentation	
Total		
Comments		