ELEC6211 Project Preparation

Dr Nicolas Green

Building 53
Room 4010
x23778
ng2@ecs.soton.ac.uk

Introduction

This module is intended to give MSc students the opportunity to demonstrate mastery of understanding of a specific discipline, critical evaluation of research and methods and to show awareness of the current limits of knowledge in preparation for conducting personal research in the same discipline.

Fourteen cohorts:

•	Dr Richard Watson	4475 MSc Artificial Intelligence
---	-------------------	----------------------------------

 Dr Abdolbaghi Rezazadeh 4466 MSc Computer S 	cience
---	--------

Dr Gary Wills
 5471 MSc Cyber Security

Dr Elena Simperl
 6150 MSc Data Science

Dr Julian Rathke
 4469 MSc Software Engineering

Prof Les Carr 4470 MSc Web Technology

• Dr Maurits de Planque 5885 MSc Biodevices

• Dr Paul Chappell 4486 MSc Energy and Sustainability with Electrical Power Eng.

• Dr Basel Halak 6117 MSc Embedded Systems

Prof Steve Beeby 4480 MSc MEMs

Dr Koushik Maharatna
 4442 MSc Microelectronic System Design

• Dr Martin Charlton 4479 MSc Nanoelectronics and Nanotechnology

Dr Bing Chu 6074 MSc Systems, Control and Signal Processing

• Dr Koushik Maharatna 4471 MSc System on Chip

Concept

The concept of the course is simple. It acts as a preparatory activity for the summer project, through occasional meetings with your Programme Leader and supervisor.

The aim is to give you an understanding of the area of research that you are doing your project in and to allow you and your supervisor to develop the concept behind your summer project.

The key activity for this module are reading and summarising research articles and building an understanding of the *context* for the research. The critical points to address are those from the introduction of a dissertation.

What is the general setting for your work?

What work have other people done and **how**?

What is the aim or key objective of your project?

Why is this important?

What will be the value of your contribution?

Lecture sessions

The Friday lecture and Wed/Fri Group lectures (Week 4 onwards) is required attendance sessions to all students on the course but do not necessarily run in every week. These sessions will cover the required knowledge for the module, background material on research and research methodologies and information about the coursework submissions.

Topics:

General writing discussion; Academic Integrity; Writing reviews; Ethics; What is research?; What is analysis?; Project Planning; Legal and commercial aspects; Giving presentations

The exact times for these sessions will be published later

Activity	Lecture 2 COHORTS	Lecture 3 EEE COHORTS	Lecture 3 CS COHORTS	Lecture 4 EEE COHORTS	Lecture 4 CS COHORTS	Lecture 1 ALL COHORTS	Mostings	
Day/time	Various times	Fri 14:00	Wed 13:00	Fri 13:00	Wed 15:00	Fri 15:00	Meetings Student/	
location	Various locations	2A-2077	67-1027	2-1039	29-1101	46:3001	Super visor	
Week 1						Introductory Lecture		
Week 2	Discussion					Writing in Research		
Week 3	Discussion					Al Issues		
Week 4		ТВС	ТВС	ТВС	ТВС	ТВС	Meeting	
Week 5		ТВС	ТВС	ТВС	ТВС	ТВС		
Week 6		ТВС	ТВС	ТВС	ТВС	ТВС	Meeting	
Week 7		ТВС	ТВС	ТВС	ТВС	ТВС		
Week 8		ТВС	ТВС	ТВС	TBC	ТВС	Meeting	Review
Easter holidays								
Week 9		ТВС	ТВС	ТВС	ТВС	ТВС	Meeting	
Week 10		ТВС	ТВС	ТВС	ТВС	ТВС		
Week 11		ТВС	ТВС	ТВС	TBC	ТВС	Meeting	Project Plan
Week 12								Poster
Exam period								
CONFERENCE June 2017								

Project allocation activity

Timetabled discussion sessions with Programme Leaders over weeks 2-3 to discuss research themes, topics and the allocation of supervisors.

Programme Leader	Course Code	Course title	Room	Time
Richard Watson	4475	MSc Artificial Intelligence	44-2103	Mon 11:00
Abdolbaghi Rezazadeh	4466	MSc Computer Science	27-2003	Thu 12:00
Gary Wills	5471	MSc Cyber Security	7-3021	Tue 12:00
Elena Simperl	6150	MSc Data Science	4-4003	Mon 12:00
Julian Rathke	4469	MSc Software Engineering	58-1023	Mon 15:00
Les Carr	4470	MSc Web Technology	58-1065	Mon 10:00
Maurits de Planque	5885	MSc Biodevices	59-1257	Thu 9:00
Paul Chappell	4486	MSc Energy and Sustainability with Electrical Power Eng.	27-1133	Thu 15:00
Basel Halak	6117	MSc Embedded Systems	34-3011	Thu 16:00
Steve Beeby	4480	MSc MEMs	59-1257	Thu 9:00
Koushik Maharatna	4442	MSc Microelectronic System Design	34-2003	Mon 11:00
Martin Charlton	4479	MSc Nanoelectronics and Nanotechnology	59-1257	Thu 9:00
Bing Chu	6074	MSc Systems, Control and Signal Processing	4-4051	Mon 11:00
Koushik Maharatna	4471	MSc System on Chip	34-2003	Mon 11:00

Project allocation activity

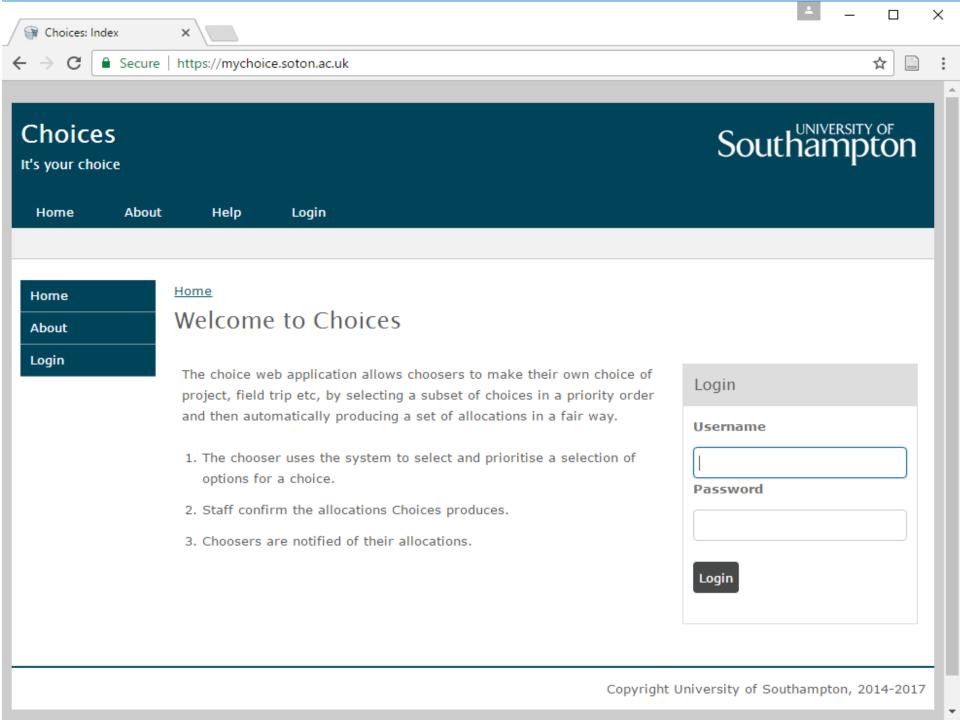
Project allocation will done using the University Choices system:

https://mychoice.soton.ac.uk

Students accessing the system will be asked to select 6 options from the list of available project option titles available by the end of week 3 (deadline 10:00am on the 20th of February).

An allocation will be made based from your choices.

The system and more detailed instructions will be made on Monday 6th February.



The General Research Review

Programme Leaders and Supervisors will provide you with suggested and directed background articles for the area relevant to the work of the summer project.

You should read and summarise these articles, producing a 3-page, two-column format, survey article indicating the background to the problem, the methods and results presented in your group of articles, a comparison and evaluation of approaches, and an indication of the outstanding, unsolved, issues and problems. It should be prepared as if it was going forward to publication - i.e. checked for spelling and other errors and of the highest quality you can produce. It should contain a properly formatted short bibliography included in the page limit.

Review format

You should choose a standard journal appropriate to your discipline - your supervisor will be able to advise you on this. For those using LaTeX this is easy as most publishers provide LaTeX style files that do most of the work for you. Submit your draft report electronically.

Word and LaTeX formatted templates for IEEE journals are provided on the Course home page.

Note on IEEE format: references according to this document include the title of the reference. This is not necessary in this review: because of the tight page limit, reference titles can be omitted.

Remaining two courseworks

The Project Plan:

The second submission is the Project Plan, which should consist of the following sections:

- 1. Title, Aims and Objectives
- Description of Methodology
- 3. Summary of ethical aspects of your project
- 4. Summary of legal/commercial aspects to your project

The Poster and the Conference:

Lastly you will prepare a small poster summarising the context of your project and your plan for presentation at a miniconference.

Resources

There are online lectures available covering aspects of technical writing.

Online Lecture 1: Technical Writing - Overview

This online lecture provides an overview of technical writing. It is broken down into three short ~20 minute videos, and you should watch each one in turn. Click on each image to watch the video.

Online Lecture 2: Technical Writing - Structure

This online lecture provides a more in-depth look at the different sections of a technical document. It is broken down into short videos (totalling just over 1 hour), and you should watch each one.

Online Lecture 3: Technical Writing - Reviews

This online lecture provides an overview of writing review papers and articles

Significant dates

Deadline/activity	Date	
MyChoice available	Monday 6 th February	
Deadline for Choice of options	10:00 Monday 20 th February	
Supervisor allocation	Monday 20 th – Tuesday 21 st February	
Start work on review	Wednesday 22nd February	
Review submission	Thursday 23 rd March	
Project Plan submission	Thursday 18 th May	
Poster submission	Thursday 18 th May	
Conference	Around 8th June TBC	