THESIS PROJECTS

Information Booklet 2012/2013

Contents

Introduction

Blackboard contains a list of suggested MSc thesis project titles and details for this year. Below is a list of supervisors, we may add more shortly.

Prof Leonid Gelman (*Signal Processing*)
Dr Toby Breckon (*Image Processing)*
Dr Stuart Barnes (*Software Engineering for Technical Computing*)
Dr Karl Jenkins (*CAD/CFD, Optimisation, Visualisation*)
Dr Carol Armitage (*CFD/ Optimisation*)
Dr Peter Sherar (*Geometric Modelling & Visualisation*)
Dr Mark Stilwell (Advanced Computing Environments & Applications)
Dr Patrick Verdin (CFD / Optimisation / Icing)
Dr Stuart Gibson(University of Kent Image Processing)
Stefan Rueger (Open University Image Processing)
A. Gaszczak (JLR Image Processing)
Robert Sawko (Cranfield)

Please look through the list to identify the areas and individual projects you are interested in. Some brief presentations by supervisors will take place. Dates to be arranged and placed on the Google timetable.

Selecting a project

You will be asked to make three selections in order of preference and submit your selection, using the form on Blackboard entitled "Thesis Project Choices Form".

Once completed this can be emailed to AMAC-MScAdmin@cranfield.ac.uk or handed in to the admin office. We will aim to meet the selections made but final assignment of projects to students is solely under the control of the department.

Students who have approached other departments or external bodies (companies for example) for projects should still complete the form as stated.

ESTIA students please complete the form stating your thesis/internship title and who it is with.

Thesis Projects Not on Blackboard

If you already have a project in mind, please approach your option leader:

➢ CAE Prof Thompson
➢ DCeS Dr Stillwell
➢ DSIP Professor Gelman or Dr Breckon
➢ SETC Dr Barnes

If the option leader agrees, you must then send a one page technical summary to the Course Director (via AMAC-MScAdmin@cranfield.ac.uk). The Course Director will then send you an email stating whether or not it has been accepted.

Thesis Projects with Industry Not on Blackboard

Each year a number of projects are offered by industry. Some of these are initiated by students who contact a range of companies; others are generated by members of academic staff.

If the student has initiated the project then they need to write a one page technical description of the project which will give details of: the work programme, how it will be assessed, the current state of the art, where the work will be done, the risks involved and details of the industry contact.
This description must be approved by the Option Leader and the Course Director.
The University, student and the organization have to formally agree issues relating to IP, confidentiality, liability and payment. There are documents which have to be completed which are available on Blackboard and/or from the Course Administrator.

Please be aware that there may be financial issues that will have to be addressed before the project can commence. Further details about this will be discussed at a later date with those who have chosen this path.

Paperwork and Finances Regarding Industrial Thesis

The "MSc Project Contract 2012" form found on Blackboard under Thesis/Forms is to go to all companies who are sponsoring students, along with the agreed technical description. The technical description needs to be approved by the Option Leader prior to the Course Directors approval. The student should supply all the contact details.

Cranfield University needs to enter into an agreement with the company to control confidentiality and liability issues.

The normal rate is £5k per project plus expenses, if the student finds the project themselves. If Cranfield finds the project then the rate is negotiable (probably £500 to the student).

If the student has paid fees then no further monies will be due to the University, unless the project incurs specific costs. If the student is being paid and received a bursary then Cranfield will receive half of the monies up to the level of the University fees (£8k).

ESTIA Based Students

ESTIA based students will do internships organised by themselves and ESTIA. These students must submit a report at the end of the following months: April, May, June and July. Even if the internship is late in starting a report must be submitted stating this. The report should be emailed to the supervisor and cc'd to the course administrator. IF the thesis is to be restricted please see the relevant section about restricting a thesis.

TimeLine (These dates are subject to change)

Friday 11th January 2013	Students submit their thesis choice, must select 3
Friday 18th January 2013	Students will be informed which project they have been allocate and who the supervisor will be
Friday 12h April 2013	Students to submit a 4 page literature review to supervisors (via email)
Friday 19th April 2013	Students to submit to supervisors a project plan (via email)
17th, 18th & 19thh July 2013	Students to present a technical presentation, industrial partners may attend
Thursday 15h August 2013	Hand in thesis and POSTER to AMAC Admin office
28th,29th& 30th August 2013	Vivas for Cranfield based students (held at Cranfield)
4th, 5th, 6th September 2013	Vivas for ESTIA based students (held at ESTIA)

Frequently Asked Questions

https://intranet.cranfield.ac.uk/Students/Pages/ThesisHandIn.aspx

Previous Thesis Projects

To view previous thesis projects log onto the extranet:
https://www.cranfield.ac.uk/extranet
logon then select "Masters Theses Archive" from the list on the left hand side.

Literature Review & Project Plan

Students should send an email to their supervisor with a four page literature review on the date specified in the timeline. A further email will then be sent showing the project plan. This can be a Gantt chart of list of proposed dates.

Technical Presentation

Each student will give a presentation lasting 15 minutes, and will be followed by 5 minutes of questions. The student will be expected to present their project using any presentation tool they require: PowerPoint, laptop, hardware etc. The following five minutes will be questions from the academics and other students present. Students are required to attend ALL the presentations that take place the same day as their own.

Poster

Blackboard contains a template for the A3 "poster". The poster will be included on the CD which is submitted on the hand in date. The poster is displayed during your viva and possibly our industrial partners may come to view them. You do not have to print this out.

Restricted Thesis

If your thesis is to be restricted, please ensure you complete the restricted access form **BEFORE** you hand in your final thesis. Theses are typically restricted for 2 or 3 years if a good case is submitted and the Dean accepts. This form has to be approved and the process does take several weeks. Delays may mean a delay with your viva and you failing to qualify to pass the MSc

Handing In Your Thesis

Prior to the hand in date you will received a "Thesis Submission" task in your EVE account. This form needs to be completed and printed out.

You will need to bring into the admin office either on or before the hand in date:-

- ➢ Completed EVE task form, hardcopy

- ➢ 2 spiral bound hard copies of your thesis, with a clear cover and card back

- ➢ 1 CD/DVD. Please ensure it contains all the items mentioned in the "CD/DVD Contents" section.

The covers, cd and spiral combs will be supplied to you without charge via the admin office and you can pick these up usually a couple of weeks prior to the hand in date. You may also use the binding machine in the admin office.

CD/DVD Contents

Please ensure **all** of the following materials are on your DVD.
- all your thesis report materials (PDF + doc/latex/OO/figure etc. source files)
- all your thesis poster materials (PDF + powerpoint/latex/OO/figure etc. source files)
- all your thesis code and executables
- all of your project data (copy of) unless it is too big to go on the DVD
-
- a reasonable README file type instructions for using your code/executables with the data
- all your materials and **videos** from your thesis presentation (PDF+powerpoint/ latex/OO/figure etc. source files)

Please test your DVD (on more than one machine).

If materials are missing we may not be able to pass your MSc if it is selected as a grading sample for examination at the Board of Examiners."

Thesis and Poster Naming Convention

The pdf version of your thesis MUST be named in the following way:-

        <LASTNAME> space <first name >space<student number>

For example

        BUCK Pauline 479971.pdf

Your poster should be:-

        <LASTNAME> space <first name >space<student number>space<Poster>

For example

        BUCK Pauline 479971 Poster.pdf