



# Faculty of Information Technology

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Clayton School of Information Technology (CSIT)  
Honours Orientation Session. 22 February 2008 10 am – 12 noon.

for BCS, BSE, BBIS Honours degree students.

# Honours Orientation Schedule 2008

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- 10.00 — 10.10 Welcome, Dr David Albrecht, AHOS,  
Dr Jon McCormack (Honours Co-ordinator)
- 10.10 — 10.45 Introduction to Honours
- 10.45 — 11.00 Language Skills Advice (Amanda Everaert)
- 11.00 — 11.15 Perspective of a Supervisor (Dr Alan Dorin)
- 11.15 — 11.30 Project Selection Information
- 11.30 — 12.00 Morning tea with academic staff

# Welcome to Honours!

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- Co-ordinator: Dr Jon McCormack, Room 144, Building 63, x 59298
- Email: [jon.mccormack@infotech.monash.edu.au](mailto:jon.mccormack@infotech.monash.edu.au)
- [www.csse.monash.edu.au/~jonmc](http://www.csse.monash.edu.au/~jonmc)
- Today we will look at:
  - degree structure and expectations (BCS, BSE, BBIS)
  - research thesis
  - how to get through honours with your degree and sanity intact!

# Why do Honours?

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- Extend your knowledge of Computer Science, Software Engineering or Business Systems.
- To be challenged: extend the limits of your capabilities and develop better skills (computing, communication, management)
- Interested in state-of-the-art research.
- Seeking a better starting position in the job market.
- Honours is about *research education*

# Research–Oriented Studies

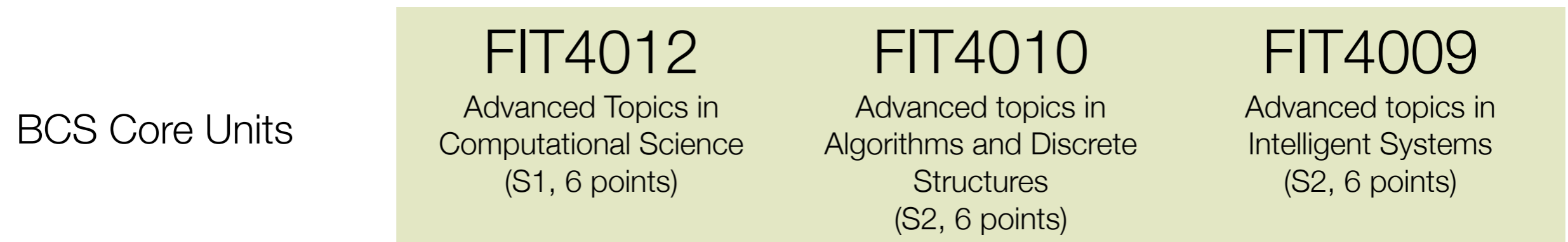
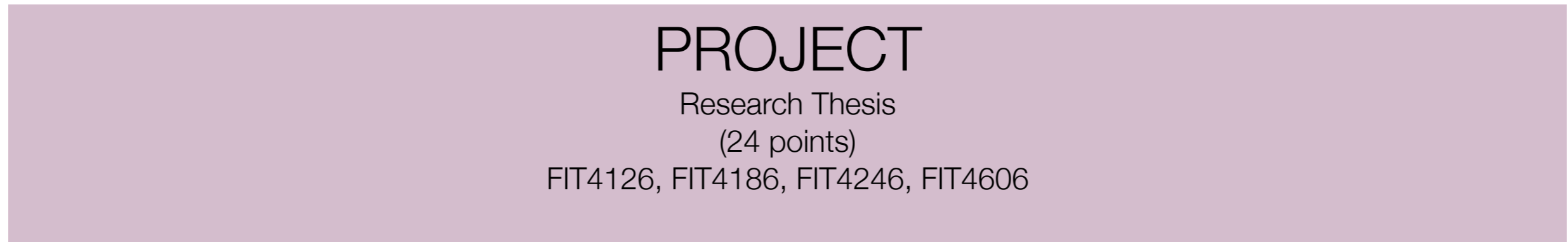
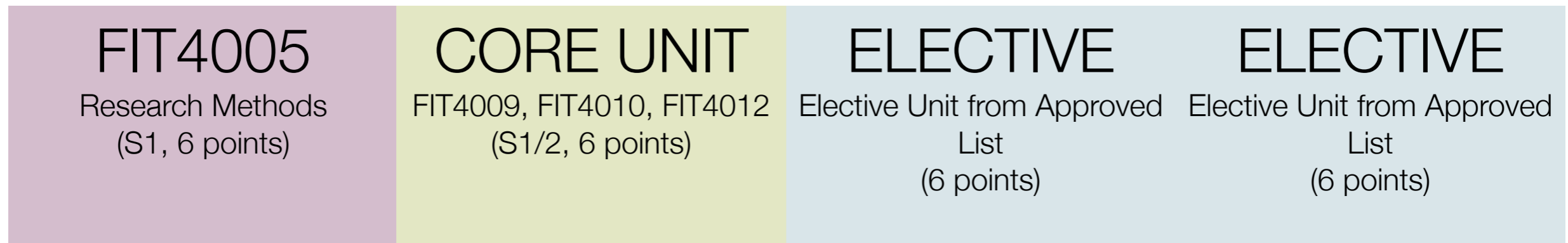
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- Very different than undergraduate
- Units are more research-oriented, open-ended
- Literature: papers, journals, conference articles
- Not just about Science: meta-skills – learn how to learn; effective use of literature; internet; databases
- A chance for personal development:
  - Communication skills
  - Time management
  - Cope with (temporary!) frustration
  - Define your own goals

# Course Structure: BCS

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48 point degree structure



# Course Structure: BCS electives

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BCS Students must choose 2 x 6 point electives in their degree. This page shows the elective units:

- FIT4008 Reading Unit
- CSE4333 Parallel and Distributed Systems
- CSE4431 System Validation and Verification, Quality and Standard
- FIT4009 Advanced topics in Intelligent Systems
- FIT4010 Advanced topics in Algorithms and Discrete Structures
- FIT4012 Advanced topics in Computational Science
- FIT4007 Advanced topics in Information Systems

# Course Structure: BCS other electives

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Instead of choosing two units from the electives list, students may complete one FIT4XXX unit from the above list and a 6-point unit chosen from an approved list of units published by the faculty.

- FIT4015 Digital communication technology and protocols
- FIT4016 Information Security
- FIT4017 Network management
- CSE4213 Formal Methods in Software Engineering
- FIT5010 Advanced internet protocols and applications
- FIT5011 Advanced network design and performance
- FIT5012 Coding and compression for digital communication
- CSE5230 Data mining
- CSE5323 Professional issues
- CSE5340 Programming language concepts and semantics
- CSE5610 Intelligent Software Systems
- CSE5910 Java for programming multimedia applications

# Course Structure: BBIS

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48 point degree structure

**FIT4005**

Research Methods  
(S1, 6 points)

**FIT4007**

Advanced topics in  
Information Systems  
(S2, 6 points)

**ELECTIVE**

Elective Unit from Approved  
List  
(6 points)

**ELECTIVE**

Elective Unit from Approved  
List  
(6 points)

**PROJECT**

Research Thesis  
(24 points)

FIT4126, FIT4186, FIT4246, FIT4606

# Course Structure: BBIS other electives

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- BUS5720 - Corporate groupware\*
- FIT4008 - Reading unit
- FIT5151 - Object oriented business application development
- FIT5059 - Advanced programming for database applications\*
- FIT5077 - eBusiness application development\*
- FIT5152 - User interface design and development
- FIT5094 - IT for management decision making
- FIT5095 - Data warehousing
- FIT5093 - Business intelligence applications
- FIT5157 - Services science
- FIT5158 - Customer relationship management and data mining
- FIT5159 - IT for financial decisions
- FIT5101 - Enterprise systems\*
- FIT5092 - e-Business\*
- FIT5111 - Information systems development practices
- FIT5102 - IT strategy and governance

\*Can be taken only if you haven't done the equivalent undergraduate unit.

# Course Structure: BSE

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12 point honours research project component

CSE4402

Research Project  
(12 points)

CSE4402 is a 12 point unit, but has a *double weighting* toward your overall honours mark.

# BCS Coursework: Core Units (electives BBIS/BSE)

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- **FIT4012:** Advanced Topics in Computational Science (S1)
  - 2 “Natural Computing” Modules: Artificial Life & Procedural Modelling; Evolutionary Simulation and Synthesis
  - Lectures start Monday, 10am–12noon, CEMA Media Room (145/63)
- **FIT4009:** Advanced Topics in Intelligent Systems (S2)
  - 2 Modules: Topic 1: Natural Language Processing and User Modelling in Assistive Technologies; Topic 2: Cryptography
- **FIT4010:** Advanced Topics in Algorithms and Discrete Structures (S2)
  - Topics in Optimisation & Constraints: CLP, Linear Programming, ...

# Standards Expected

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- High qualification -> average high level
- Collaboration is as important as competition

## BCS/BBIS

Grade	Mark
H1	80-100
H2A	70-79
H2B	60-69
H3	50-59
N	<50

## BSE

Grade	Mark
H1	80-100
H2A	75-79
H2B	70-74
H3	65-69
No honours grade awarded	<65

In general:

- ✱ a good H1 grade is required for PhD scholarships.
- ✱ H1 or H2A is an entry requirement for PhD.

# Research Project (Thesis)

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- A sustained investigation into a research topic in Computer Science, Software Engineering or Business Systems. The main assessed component is the written thesis (80%), normally 30-50 pages long.
- Students work with an academic supervisor throughout the year.
- Project selection forms must be completed by Friday 29 Feb 2008. You must provide a ranked list of at least 4 projects from 3 different supervisors.
- Hand your form in to the Clayton FIT general office by 12 noon.
- Failure to complete a form will result in you being assigned a random project.
- You **must** talk with project supervisor before selecting a project
- The list of projects for 2008 is at: <http://www.infotech.monash.edu.au/courses/2008/undergraduate/1608/projects-2008.html>

# What to Expect

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- Several hundred hours of work (50% of the year)
- Typically very busy, particularly in second semester
- A tough time at the end
- Open-ended project (unlike 3rd year)
- Sometimes not even your supervisor knows the solution
- A partnership with your supervisor
- Negative results are not always bad
- A chance to get your work known: poster, conference or journal paper
- Work with your peers, talk, enjoy, fun!

# Research Project Assessment

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Assessed Components as part of FIT4126, FIT4186, FIT4246, FIT4606 (BCS/BBIS Honours) and CSE4402 (BSE Honours) Workshops are run by Language Skills (Amanda Ever)

✳ See the unit guides and muso pages for more specific information on assessment (under FIT4126 or CSE4402)

Component	Due Date	Weighting	Comments
Research Proposal	S1, week 10	5%	A written report that summarises the research to be undertaken and includes a detailed plan describing how the research is to be undertaken.
Literature Review	S1, week 14	10%	A written report that gives a detailed survey and analysis of prior research in the area of your project topic.
Interim Presentation	S1, week 15	hurdle	A 15 minute oral presentation to fellow students and academic staff summarising your project, prior work and your planned achievements.
Final Presentation	S2, week 14	5%	A 20 minute oral presentation to fellow students and academic staff summarising your project and its outcomes.
Thesis	S2, week 15	80%	Written thesis documents your achievements in researching and implementing the project, including results and analysis.

# Research Project Workshops

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Workshops are run to assist you in successfully completing the assessment in the research project.

✳ See the unit muso pages for more specific information on workshops (under FIT4126 or CSE4402)

Workshop	Date	Comments
Ethics Workshop	S1, week 2	Workshop for students who may have ethical issues with their project (e.g. surveys or interviews).
Library Orientation*	S1, week 3	An introduction to library facilities and services. How the library can assist you with your research. Run by Sara Miranda, Hargrave-Andrew library.
Research Proposal Workshop	S1, week 4	A guide to preparing your research proposal.
Literature Review Workshop	S1, week 8	Assistance with preparation of the literature review.
Preparing the Interim Presentation	S1, week 13	A guide to preparation and delivery of the interim presentation.
Thesis Writing Workshop	S2, week 3	A guide to writing the final thesis.
Presentation Workshop	S2, week 12	Assistance with the final oral presentation.
Final Presentation Rehearsal	S2, week 13	A practice run of the final presentation with feedback.

\*Assessed as part of FIT4005 Research Methods.

# Honours Rooms

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- Honours room is the MUSE lab in building 26, room G13.
- Honours students will need to see Paul Van Haaster to get Swipe card access to the labs.
- Accounts on lab machines should be set up by ITS automatically.

# Where to From Here?

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- Meet with potential supervisors
- Evaluate projects carefully!
- Make project selections and return form
- Get access to honours room/lab
- Lectures start Monday: preparation is vital
- Address small problems before they become big ones!