Y2 Module Pre-Enrolment Guiding Event

May 2023

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Please save questions for after the presentation (or place them into the Teams chat)

If you have further questions after this session, contact me via peer-olaf.siebers@nottingham.ac.uk

Plans or Programmes of Study

Full Details: https://www.nottingham.ac.uk/studywithus/ugstudy/search-results.html?search=computer+science

- Programmes Computer Science
  - BSc Hons CS (G400)
  - BSc Hons CS with Year in Industry (G407)
  - MSci Hons CS (G404)
  - MSci Hons CS including Int Year (G406)

- Programmes Computer Science with Artificial Intelligence
  - BSc Hons CS with AI (G4G7)
  - BSc Hons CS with AI with Year in Industry (G4GB)
  - MSci Hons CS with AI (G4G1)
  - MSci Hons CS with AI including Int Year (G4GA)

- Programmes Computer Science with Cyber Physical Systems
  - BSc Hons CS with CPS (G408)
  - MSci Hons CS with CPS (G409)

A Note on Terminology

- You may encounter confusing terminology:
  - OLD: **Courses** -> NEW: Plans
  - OLD: **Modules** -> NEW: Courses

- ALSO terminology is mixed for:
  - L1= **1st year** = Qualifying year in plan specifications (warm up)
  - L2 = **Y2** = Part I in plan specifications (counts for BSc/MSci degree)
  - L3 = **Y3** = Part II (counts for BSc/MSci degree)
  - L4 = **Y4** = Part III (counts for MSci degree)

Comparison

Y2 Programme Comparison 2023				Programmes CS	Programmes CS with AI	Programmes CS with CPS
				G400/G407/G404/G406	G4G7/G4GB/G4G1/G4GA	G408/G409
Compulsory	CR	Sem		90	110	100
COMP2001	20	S	Artificial Intelligence Methods	N/A	x	N/A
COMP2002	20	F	Software Engineering Group Project	x	x	x
COMP2007	20	A	Operating Systems and Concurrency	x	x	x
COMP2012	10	S	Languages and Computation	x	x	x
COMP2013	20	A	Developing Maintainable Software	x	x	x
COMP2054	10	S	Algorithms Data Structures and Efficiency	x	x	x
COMP2064	10	S	Introduction to Cyber Physical Systems	N/A	N/A	x
COMP2065	10	A	Introduction to Formal Reasoning	x	x	x
Restricted (Programmes with CSP)				N/A	N/A	choose 10-20 CR
COMP2001	20	S	Artificial Intelligence Methods	N/A	N/A	x
COMP2011	10	S	Artificial Intelligence Methods (10 CR)	N/A	N/A	x
Restricted (All Programmes)				choose 10-30 CR	choose 10 CR	choose 0-10 CR
COMP2001	20	S	Artificial Intelligence Methods	x	N/A	N/A
COMP2003	10	S	Advanced Functional Programming	x	x	x
COMP2004	10	S	Introduction to Human Computer Interaction	x	x	x
COMP2005	10	S	Introduction to Image Processing	x	x	x
COMP2006	10	S	C++ Programming	x	x	x
COMP2010	10	S	Software Specification	x	x	x
COMP2011	10	S	Artificial Intelligence Methods (10 CR)	x	N/A	N/A
COMP2014	10	S	Distributed Systems	x	x	x
Additional (from other modules in the School or from another School)				choose 0-20 CR	N/A	N/A
			SUM	120	120	120

A=Autumn Semester; S=Spring Semester; F=Full Year

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Short Videos (Compulsory and Optional Modules)

https://mediaspace.nottingham.ac.uk/playlist/details/1_t0q4vuns

COMP2009 = COMP2054 + COMP2065

Algorithms Correctness and Efficiency = Algorithms Data Structures and Efficiency + Introduction to Formal Reasoning

Assessment and Examinations

- Assessment and examinations
  - https://www.nottingham.ac.uk/studentservices/servicedetails/assessment-and-examinations/assessment-and-examinations.aspx

- Outcomes and results
  - https://www.nottingham.ac.uk/studentservices/servicedetails/assessment-and-examinations/outcomes-and-results.aspx

- Assessment resit information
  - https://www.nottingham.ac.uk/studentservices/servicedetails/assessment-and-examinations/assessment-resit-information.aspx

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A Word About Reassessment

- Reassessment period:
  - 14 August 2023 - 2 September 2023
    - Exams will be a two week period anytime within these dates (for details check BlueCastle)
    - Coursework reassessment period can vary

- University uses best sit policy on assessments
  - For each assessment component, the best mark in all attempts (original sit, additional first sit, 1st resit, 2nd resit, etc.) will always be used when calculating the overall mark

Assessment	Original Sit Mark	Reassessment Marks (single component)	Final Mark
CW1 (20%)	50	30	50
CW2 (20%)	60	30	60
EXAM (60%)	20	30	30
	34		40
	fail		pass

Optional Modules

Y2 Programme Comparison 2023				Programmes CS G400/G407/G404/G406	Programmes CS with AI G4G7/G4GB/G4G1/G4GA	Programmes CS with CPS G408/G409
Restricted (All Programmes)				choose 10-30 CR	choose 10 CR	choose 0-10 CR
COMP2001	20	S	Artificial Intelligence Methods	x	N/A	N/A
COMP2003	10	S	Advanced Functional Programming	x	x	x
COMP2004	10	S	Introduction to Human Computer Interaction	x	x	x
COMP2005	10	S	Introduction to Image Processing	x	x	x
COMP2006	10	S	C++ Programming	x	x	x
COMP2010	10	S	Software Specification	x	x	x
COMP2011	10	S	Artificial Intelligence Methods (10 CR)	x	N/A	N/A
COMP2014	10	S	Distributed Systems	x	x	x
		A=Autumn Semester; S=Spring Semester; F=Full Year				

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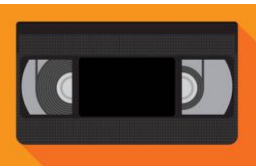
COMP2001.20S.Artificial Intelligence Methods

- **Content:** This module **builds on the first year Fundamentals of AI**, which covers the ACM learning outcomes, and introduces new areas. The emphasis is on building on the AI research strengths in the School. It gives **brief introductions to topics in AI**, including **fuzzy logic** and **modern search techniques** such as, Iterated Local Search, Tabu Search, Simulated Annealing, Evolutionary Algorithms, Genetic Algorithms and Hyper-heuristics, etc. Students will also explore the **implementation and application** of some AI techniques.

- **Convenor(s):** Dr Ender Özcan

- **Weekly Teaching:** 1 x 2 hrs Lecture + 1 x 2 hrs Computing

- **Assessment:**

> **A framework in Java was used in this module to implement several algorithms**

Assessment Type	Weight	Requirements
Coursework 1	50	Programming assignment(s)/exercise(s) which will involve writing of one or multiple programs implementing AI methods applied to specific problems and associated in-class tests.
Exam 1	50	1.5 hours written examination.

Reassessment for the module is 100% written examination.
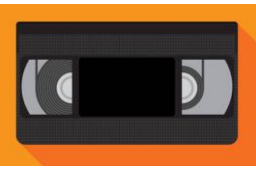
COMP2011.10S.Artificial Intelligence Methods (10 CR)

- **Content:** This module builds on the first year Fundamentals of AI, which covers the ACM learning outcomes, and introduces new areas. The emphasis is on building on the AI research strengths in the School. It gives **brief introductions to topics in AI**, including **fuzzy logic** and **modern search techniques** such as, Iterated Local Search, Tabu Search, Simulated Annealing, Evolutionary Algorithms, Genetic Algorithms and Hyper-heuristics, etc. ~~Students will also explore the implementation and application~~ ~~of some AI techniques.~~

- **Convenor(s):** Dr Ender Özcan

- **Weekly Teaching:** 1 x 2 hrs Lecture

- **Assessment:**

Assessment Type	Weight	Requirements
Exam 1	100	1.5 hours examination.

Reassessment for the module is 100% written examination.

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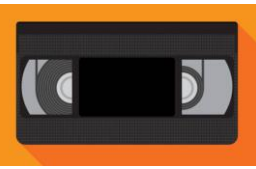
COMP2003.10S.Advanced Functional Programming

- **Content:** Building upon the introductory Functional Programming module in Y1, you will focus on a number of more advanced topics such as: **programming with effects; reasoning about programs; control flow; advanced libraries; improving efficiency; type systems; and functional pearls**.

- **Convenor(s):** Prof Graham Hutton

- **Weekly Teaching:** 2 x 1 hr Lecture + 1 x 2 hrs Computing

- **Assessment:**

> **Haskell was used in this module to write some code**

Assessment Type	Weight	Requirements
Coursework 1	25	Programming exercises.
Exam 1	75	2 hours written examination.

Reassessment for the module is 100% written examination.

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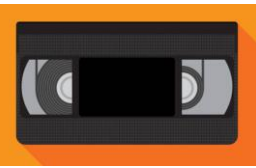
COMP2004.10S.Introduction to Human Computer Interaction

- **Content:** This module aims to teach an understanding of **people's interactions with technology** and how to apply this knowledge in the **design of usable interactive computer systems**. The module will introduce the concept of usability and will examine different design approaches and evaluation methods. Specifically, this module will cover an understanding of **different styles of interaction with technology, an analysis of user needs, design standards, low fidelity prototyping techniques and a comparison of evaluation techniques**.

- **Convenor(s):** Dr Gail Hopkins

- **Weekly Teaching:** 1 x 1 hr Lecture + 1 x 1 hr Workshop

- **Assessment:**

Assessment Type	Weight	Requirements
Coursework 1	50	2000 word design and prototype exercise; individual coursework.
Coursework 2	50	3000 word evaluation coursework; group coursework.

Reassessment for the module is 100% individual coursework.

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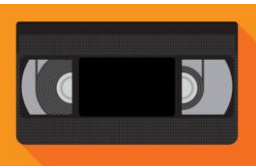
COMP2005.10S.Introduction to Image Processing

- **Content:** This module introduces the field of digital image processing, a fundamental component of digital photography, television, **computer graphics** and **computer vision**. You will cover topics including: **image representation and compression, image filtering, enhancement and analysis and image processing applications**.

- **Convenor(s):** Dr Armaghan Moemeni

- **Weekly Teaching:** 2 x 1 hr Lecture + 1 x 1 hr Computing

- **Assessment:**

> **The MATLAB Image Processing toolbox was used in this module**

Assessment Type	Weight	Requirements
Coursework 1	40	2000 word Programming assignment/report
Exam 1	60	1 hour written examination

Reassessment for the module is 100% written examination.
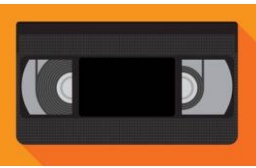
COMP2006.10S.C++ Programming

- **Content:** You will cover the programming material and concepts necessary to obtain an **understanding of the C++ programming language**. You will spend around **four hours per week** in lectures and computer classes for this module and will be expected to take **additional time to practice and to produce your coursework**. The tutorial is held in a lecture room and is a practical session to ask questions, get feedback, practice what you have learned and see examples.

- **Convenor(s):** Dr Chao Chen

- **Weekly Teaching:** 2 x 1 hr Lecture + 1 x 1 hr Tutorial + 1 x 1 hr Computing

- **Assessment:**

Assessment Type	Weight	Requirements
Coursework 1	100	One or more pieces of coursework demonstrating the knowledge and experience which has been developed in the computing labs each week.

Reassessment for the module is 100% individual coursework.
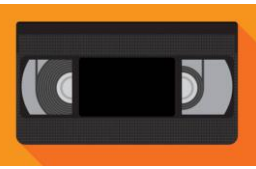
COMP2010.10S.Software Specification

- **Content:** Building on the material presented in the Foundations of Software Engineering module, you will cover two main aspects of the software engineering process in depth: requirements and design. This will cover **modern approaches to large scale requirements and engineering and specification**, and **approaches to systems and architectural design**.

- **Convenor(s):** Dr Julie Greensmith

- **Weekly Teaching:** 2 x 1 hr Lecture + 1 x 1 hr Computing

- **Assessment:**

Assessment Type	Weight	Requirements
Coursework 1	100	A single piece of individual coursework (including video pitch, use cases and software) demonstrating practical application of key concepts.

Reassessment for the module is 100% written examination.
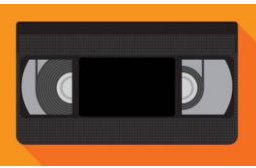
COMP2014.10S.Distributed Systems

- **Content:** This module covers the following topics: overview of **parallel and distributed computing**; applications of distributed systems; fundamental concepts of distributed systems (processes and message passing, naming and discovery, fault tolerance and partial failure, consistency and cacheing, security); **reliable network communication**; **distributed system design approaches** (direct vs indirect communication, client-server vs peer-to-peer, stateful vs stateless interfaces); introduction to **distributed data management**; introduction to **distributed algorithms**.

- **Convenor(s):** Prof Chris Greenhalgh

- **Weekly Teaching:** 2 x 1 hr Lecture + 1 x 1 hr Computing or Laboratory

- **Assessment:**

Java was used in this module to write some code

Assessment Type	Weight	Requirements
Exam 1	100	2 hours written examination

Reassessment for the module is 100% written examination.

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Transfers Your Programme of Study (Moodle Community Page)

https://moodle.nottingham.ac.uk/course/view.php?id=118881

Module Choice Information (Moodle Community Page)

https://moodle.nottingham.ac.uk/course/view.php?id=118881

Module Enrolment (UoN StudentServices Page)

https://www.nottingham.ac.uk/StudentServices/Servicedetails/Module-Enrolment/Module-Enrolment.aspx

Some Good Practices to Remember

90-100: Outstanding
80-89: Excellent
70-79: Very good
60-69: Good
50-59: Adequate
40-49: Less than adequate
30-39: Poor
0-29: Very poor

- See your personal tutor regularly

- Remember that all grades now count for your final degree
  - Required commitment is getting higher and likelihood of getting top grades is getting lower

- Deal with lectures and labs when they are scheduled

- Learn to coordinate your time so that you can cope with the assessment load towards the end of a semester
  - https://www.nottingham.ac.uk/studyingeffectively/organised/yourself.aspx

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Any Questions?