

School of Computer Science and Engineering Education Committee Meeting - DRAFT

Minutes of the meeting held on Friday, 4 August 2023

PRESENT: John Shepherd (Chair)

Abiram Nadarajah

Aditya Joshi Alan Blair Ali Darejeh Andrew Taylor Arcot Sowmya Armin Chitizadeh Basem Suleiman

Bruno Gaeta

Dong Gong

Eric Martin Fethi Rabhi

Hammond Pearce Hayden Smith Jake Renzella

Oliver Diessel, Raymond Wong

Kevin Elphinstone

Michael Thielscher

Nick Patrikeos

Nicola Kwan

Paul Hunter

Rahat Masood

Tanat Wasoou

Raveen de Silva Ravmond Louie

Sara Ballouz

Sebastian Sequoiah-

Grayson

Sebastianus Kandi

Sushmita Ruj

Tina Tuomikoski

Wayne Wobcke

Yuchao Jiang

Yulei Sui

1. OPENING OF MEETING

APOLOGIES:

The Chair opened the meeting at 11am.

2. CONFIRMATION OF MINUTES

The Committee considered the minutes of the meeting held on 7 July 2023.

Resolution: The Committee confirmed the minutes of the meeting held on 7July 2023 as a true and accurate record of the meeting.

3. REVIEW OF ACTION SHEET

The Committee discussed open action items from the meeting held on 7 July 2023.

4. ITEMS FOR DECISION

4.1 New Course: Software Security Analysis and Verification - Yulei Si

The course aims to systematically explore automated source code analysis and verification techniques to enhance software security. It has been thoughtfully designed to cater to both undergraduate and postgraduate students. The prerequisite requirements have been carefully considered, and currently, the prerequisite is either COMP9024 or COMP6771. Additionally, Paul and John suggested adding MATH1081 as an additional prerequisite.

The course's content and alignment with existing programs have been reviewed, and suggestions from various stakeholders have been incorporated into the proposal. The course proposal was discussed with Richard who provided helpful suggestions on course content, including reducing the reliance on C++ in certain assessments, incorporating more coding exercises, and fostering a deeper understanding of internal static analysis for UNSW students. Furthermore, Richard proposed the name "Static Analysis for Software Security."

Resolution: The course was passed by the quorum.

Action: Add MATH1081 as a prerequisite for undergraduates. Send to Faculty APC September meeting.

4.2 New Course: Applied Cryptography - Sushmita Ruj

The course has been added to ECLIPS. More consultation done. The syllabus is slightly modified with inputs from Richard. Assessment details have also been added. The course is proposed as an undergraduate (UG) and postgraduate (PG) elective. UG (Data Structures and Algorithms and Discrete Mathematics) and PG (DSA & Foundations of Computing) are prerequisites. Alan mentioned adding a prerequisite for Maths Major. MATH2400 will be added as a prerequisite if students have not done Discrete Maths. DSA is still a prerequisite and can only be waived with consultation with the lecturer.

Action: Add the new prerequisites. Send to Faculty APC September meeting.

4.3 New Course: Natural Language Processing - Proposal - Aditya Joshi

An undergraduate and postgraduate course on natural language processing (NLP). The course will cover NLP approaches (rule-based, statistical, and neural) for typical NLP tasks (sentiment classification, named entity extraction, etc.). Assessment will include quizzes, programming assignment, group project and final exam.

Resolution: The course was passed by the guorum.

Action Required: Update pre-requisites: Delete COMP9024 and COMP2521. Add COMP9020+COMP9814, and COMP3411+ MATH1081. Submit a proposal to ECLIPS and send to Faculty APC September meeting.

4.4 SENG Revisions - Proposal - Fethi Rabhi

Fethi revised the Software Engineering workshops based on feedback from students.

- a. Change prerequisite for DESN2000 from COMP2521 to COMP1531 => Approved
- b. Change SENG3011 name to "Advanced Software Engineering Workshop" => Approved
- c. Change COMP2511 name to "The Art of Software Design" => Action Required: Need to show changes that have been made to Syllabus and how the name aligns at the next meeting.

5. ITEMS FOR DISCUSSION

5.1 2024 Course Offerings - John Shepherd

Large courses will be offered three times a year.

Changes:

a. COMP2041 T1

b. COMP3311 $T3 \rightarrow T2$

c. COMP3141 $T2 \rightarrow T1$

d. move more T3 to T1 and T2

Action Required: move a few more T3 courses to earlier terms.

5.2 Exams

CSE lab exam environment has a closed system with specific resources available within the closed system. CSE does not have enough labs to run invigilated exams for more than 10 large courses. Discussion on having exams with many variations and time pressure, although no guarantee the person sitting the exam is the person enrolled (except for standard signature and ID card check). INSPERA does not exist in Linux. **Update**: INSPERA was run via the exam environment for the COMP3121 exam.

Resolution: Discuss at CSE School planning day.

5.3 Lecture Attendance

Student engagement is low across Engineering. Students are using Echo360 videos and forums rather than attending lectures and consultations. Timetable issues are also a problem eg. 4-hour lectures on a Friday afternoon. Timetabling will not accept requests of no lectures on Mondays or Fridays. Also, requests to run lectures before tutes (e.g. lecture on Monday) are not well-received. Clash Free Course Combinations (CFCCs) placed on CSE courses by other Faculties restrict our timetable. Tutorial attendance is low but help sessions attendance is high.

Action Required: L&T Directors to discuss with Dean of Faculty of Science about CFCCs. Purchase Iollies and chocolates to give to students in Term 3.



6. ITEMS FOR NOTING AND INFORMATION

6.1 COMP3900/900 Projects Wanted - Basem Suleiman

An ACS accreditation requirement is to introduce "industry based" projects from internal and external clients. First phase to pilot one of the changes is to offer projects from CSE academics. Academics to provide a one-page project description with scope and key requirements/features, expected outcomes and required knowledge and skills. Groups are allocated to projects and need a mentor (effectively, a project manager). Staff to supervision ratio was raised. More projects would increase the workload of academics. Tutors can act on behalf of the academic and reduce the workload of academics. This would also be a useful strategy to help engage industry clients. Staff may need an incentive to offer projects as it will affect their workload. One such incentive: it is an opportunity for academics to find talented students who continue to research honours or PhD.

Action Required: A call will be sent to CSE academics. Basem and John will speak to Yan Liu to work on a University legal Intellectual Property to share with the clients.

6.2 Report(s) from Committees outside CSE

Engineering Academic Programs Committee: MIT wireframe model revisions have gone through including the cyber security specialisation. Canberra cyber security programs have gone through.

6.3 ECLIPS, ECOS, Data Cleansing and CSE Course Outlines - John Shepherd Discussed during action items. Most ECLIPS proposals have been updated and approved.

6.4 Report on Cyber Security Programs Working Group - Salil Kanhere Salil is overseas and the meeting time may not suit him to attend the EDC meeting. No report this month.

Action Required: Salil to delegate someone to give a summary. Proposals need to be presented at EDC Meeting by September to make it for the October Academic Programs Committee.

6.5 Report on UNSW Online - John Shepherd on behalf of Raymond Wong An acting program director for cyber security needs to be recruited while the current director is on leave.

6.5 Any Other Business

There was no other business.

The next meeting is scheduled for Friday, 1 September 2023.

JOHN SHEPHERD Chair

