UNIVERSITY OF CANBERRA

PROOF OF ENROLMENT LETTER

3 July 2025

To whom it may concern,

Name: Matheus Neves Soares Pereira
Student ID: u3241280

This is to certify that the above-named student is was enrolled at the University of Canberra. Matheus Neves Soares Pereira commenced **560AA - Bachelor of Software Engineering** on 7 February 2022.

This document serves as an official Proof of Enrolment for the Bachelor of Software Engineering (Course Code: 560AA) at the University of Canberra. It includes a comprehensive list of all subjects/units undertaken within the course, along with detailed descriptions, credit points, workload breakdowns, and semester allocations. The course requires the successful completion of 72 credit points over a standard duration of 3 years full-time. As per the academic regulations of the University of Canberra, the successful completion of a unit implies that the student has met both the required academic performance and the required workload for that unit. **This is not an official academic transcript**, and the information below does not indicate whether the individual units were passed or failed.

The language of instruction for all study is English.

Below is a summary of units enrolled for the period 7 February 2022 to 19 November 2024:

Unit Code	Unit Name	Credit Points	Semester
4483.1	Software Technology 1	3	Year 1, Semester 1
7722.5	Professional Practice in IT	3	Year 1, Semester 1
5915.6	Database Design	3	Year 1, Semester 1
4478.9	Introduction to Information Technology	3	Year 1, Semester 1
6698.5	Discrete Mathematics	3	Year 1, Semester 2
11486.1	Systems Analysis and Modelling	3	Year 1, Semester 2
11485.1	Introduction to Network Engineering	3	Year 1, Semester 2
11408.1	Technological Innovation and Entrepreneurship	3	Year 1, Semester 2
7170.6	Software Technology 2	3	Year 2, Semester 1
11492.1	Mobile Technologies	3	Year 2, Semester 1

11488.1	Security and Support in IT	3	Year 2, Semester 2
9788.3	Contemporary IT & E Issues	3	Year 2, Semester 2
7175.7	Web Design and Programming	3	Year 2, Semester 2
9074.5	Introduction to Digital Forensics	3	Year 2, Semester 2
11907.1	Advanced Cyber Security	3	Year 3, Semester 1
11514.2	System and Network Administration	3	Year 3, Semester 1
11484.1	Network Architecture	3	Year 3, Semester 1
9789.3	Technology and Engineering Management	3	Year 3, Semester 1
11759.1	Information Security	3	Year 3, Semester 1
11491.1	Software Systems Architecture	3	Year 3, Semester 2
9785.2	Information & Communication Technology Project	6	Year 3, Semester 2
9281.4	Enterprise and Cloud Computing	3	Year 3, Semester 2
11489.1	System Software	3	Year 3, Semester 2

Detailed Unit Descriptions

The following contains detailed descriptions of each unit including learning outcomes, workload, and a summary of the content covered.

System Software (Unit Code: 11489.1)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Tutorials/Labs: 22 hours
- - Weekly study commitment: 24 hours
- - Preparation for quizzes: 34 hours
- - Assignment: 40 hours
- - Assignment Evaluation Quiz: 6 hours
- - Total: ~150 hours

Learning Outcomes:

- - Describe the structures and implementation of modern operating systems.
- - Explain the role of an operating system in managing hardware and software resources.

- - Analyse and evaluate factors impacting system performance.
- - Apply mutual exclusion theory in concurrent programming.
- - Undertake basic system administration tasks.
- - Strengthen generic skills such as communication, problem solving, and professionalism.

Unit Summary:

This unit introduces the design and implementation of modern operating systems. Topics include processes, threads, mutual exclusion, scheduling, virtual memory, I/O systems, file systems, networking, and security. Students also gain system administration skills and engage in collaborative projects to apply theoretical concepts in practical scenarios.

Information Security (Unit Code: 11759.1)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Tutorials: 11 hours
- - Preparation and reading: 33 hours
- - Tutorial work and online discussions: 22 hours
- - Security Evaluation Assessment: 40 hours
- - Final Assessment: 20 hours
- - Total: ~150 hours

Learning Outcomes:

- - Interpret and integrate organisational security practices.
- - Analyse information security risks and prepare reports for various audiences.
- - Design information security requirements using appropriate tools and frameworks.

Unit Summary:

This unit examines threats and vulnerabilities in IT-based systems using a risk management approach. Students explore security policies, ISO standards, risk assessment, protection mechanisms, and cyber threats. Assessments include a personal security evaluation and a final open-book exam. The unit emphasizes ethical practices and the application of security frameworks in real-world scenarios.

Discrete Mathematics (Unit Code: 6698.5)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Tutorials: 11 hours

- - Preparation, tests, and study: 115 hours

Learning Outcomes:

- - Apply symbolic logic and construct mathematical proofs.
- - Analyze automata and recursive algorithms.
- - Solve problems using discrete structures relevant to computing.

Summary:

Introduces foundational mathematical concepts essential for computing, including logic, sets, functions, graphs, and recursion. Emphasizes symbolic logic, mathematical proofs, automata, and recursive problem-solving in IT contexts.

Software Technology 1 (Unit Code: 4483.10)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Labs/Tutorials: 22 hours
- - Assignments, quizzes, and independent study: 104 hours

Learning Outcomes:

- - Design and implement reusable software using object-oriented principles.
- - Develop GUI applications and interact with databases.
- - Apply testing and debugging techniques.

Summary:

Focuses on object-oriented programming using Python. Covers classes, inheritance, polymorphism, event handling, file I/O, GUI development, and basic testing.

Security and Support in IT (Unit Code: 11488.1)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Labs/Tutorials: 22 hours
- - Assignments, quizzes, and study: 104 hours

Learning Outcomes:

- - Manage desktop and server support operations.
- - Apply cybersecurity principles to IT systems.

- - Demonstrate ethical and professional behavior in IT support roles.

Summary:

Explores IT infrastructure support and cybersecurity. Topics include help desk operations, cryptography, malware, firewalls, authentication, and ethical practices.

Professional Practice in IT (Unit Code: 7722.5)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 35 hours
- - Assignments & quizzes: 60 hours
- - Independent study & engagement: 55 hours

Learning Outcomes:

- - Demonstrate ethical conduct and professional standards.
- - Communicate effectively in team and workplace settings.
- - Reflect on career goals and industry expectations.

Summary:

Develops professional identity and communication skills in ICT. Covers ethics, standards, team dynamics, and career planning aligned with ACS Code of Ethics and SFIA.

Database Design (Unit Code: 5915.6)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 36 hours
- - Assignments & quizzes: 75 hours
- - Independent study: 39 hours

Learning Outcomes:

- - Design conceptual, logical, and physical database models.
- - Implement databases using SQL and development tools.
- - Evaluate database performance and integrity.

Summary:

Covers relational database design, development, and implementation. Includes data modeling, normalization, SQL programming, and lifecycle management.

Systems Analysis and Modelling (Unit Code: 11486.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 46 hours
- - Assignments & quizzes: 92 hours
- - Independent study: 12 hours

Learning Outcomes:

- - Analyze organizational systems and stakeholder requirements.
- - Model systems using UML and other techniques.
- - Integrate database and HCI knowledge into system designs.

Summary:

Focuses on analyzing and modeling IT-supported systems using abstraction, UML, and other tools. Covers stakeholder analysis, use cases, class diagrams, and state machines.

Introduction to Information Technology (Unit Code: 4478.9)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 36 hours
- - Assignments & study: 114 hours

Learning Outcomes:

- - Develop basic web and software applications.
- - Apply ethical computing practices.
- - Understand core IT concepts and systems.

Summary:

Introduces binary logic, computer architecture, programming, web development, databases, and HCI. Includes HTML/CSS websites and GUI-based Python applications.

Introduction to Network Engineering (Unit Code: 11485.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 70 hours

- - Project & lab work: 80 hours

Learning Outcomes:

- - Design and simulate network architectures.
- - Apply protocols and switching techniques.
- - Manage and troubleshoot network systems.

Summary:

Covers data communication and networking fundamentals. Topics include topologies, protocols, switching, wireless technologies, and network management.

Contemporary IT & E Issues (Unit Code: 9788.3)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 36 hours
- - Group work, forums, and study: 114 hours

Learning Outcomes:

- - Analyze emerging ICT trends and challenges.
- - Evaluate ethical and governance issues in ICT.
- - Communicate professionally in global contexts.

Summary:

Explores current ICT trends including cloud computing, big data, governance, social media, and ethics. Includes Indigenous and Western perspectives.

Web Design and Programming (Unit Code: 7175.7)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 48 hours
- - Assignments & study: 102 hours

Learning Outcomes:

- - Develop responsive and accessible web applications.
- - Integrate databases and frameworks into web projects.
- - Evaluate usability and performance of web systems.

Summary:

Covers web development using HTML, CSS, JavaScript, ASP.NET, PHP, and frameworks like React and Angular. Emphasizes responsive design and usability.

Advanced Cyber Security (Unit Code: 11907.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 46 hours
- - Quizzes, assignment, and project: 104 hours

Learning Outcomes:

- - Design secure systems and communication protocols.
- - Analyze vulnerabilities and implement defenses.
- - Collaborate on cybersecurity projects.

Summary:

Explores cryptography, secure communication, vulnerabilities, firewalls, intrusion detection, and ethical issues. Includes real-world security scenarios and group projects.

Software Systems Architecture (Unit Code: 11491.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 70 hours
- - Mid-term, quizzes, and final project: 80 hours

Learning Outcomes:

- - Design software architectures using industry standards.
- - Document and evaluate architectural decisions.
- - Communicate effectively with stakeholders.

Summary:

Focuses on software architecture design from requirements. Covers architectural styles, documentation, evaluation, and stakeholder communication.

Software Technology 2 (Unit Code: 7170.6)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 36 hours
- - Assignments, quizzes, and study: 114 hours

Learning Outcomes:

- - Implement and analyze data structures and algorithms.
- - Apply modular programming principles.
- - Evaluate software performance and complexity.

Summary:

Covers abstract data types, data structures, and algorithms. Includes stacks, queues, trees, hash tables, sorting, searching, and recursion using Java.

Introduction to Digital Forensics (Unit Code: 9074.5)

Credit Points: 3

Workload Breakdown:

- - Lectures & labs: 46 hours
- - Assignments, quizzes, and study: 104 hours

Learning Outcomes:

- - Conduct basic digital investigations.
- - Analyze digital evidence using forensic tools.
- - Understand legal and ethical aspects of forensics.

Summary:

Introduces digital forensics principles including data acquisition, file system analysis, email and network investigation, and legal/ethical considerations.

Technological Innovation and Entrepreneurship (Unit Code: 11408.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 35 hours
- - Group projects, quizzes, and study: 115 hours

Learning Outcomes:

- - Develop business plans and innovation strategies.
- - Collaborate on entrepreneurial projects.
- - Pitch ideas effectively to stakeholders.

Summary:

Explores innovation and entrepreneurship in ICT. Covers business models, IP, start-up pathways, and investor pitching through group projects.

Mobile Technologies (Unit Code: 11492.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 47 hours
- - Assignments, quizzes, and study: 103 hours

Learning Outcomes:

- - Design and develop mobile applications.
- - Evaluate mobile technologies and architectures.
- - Integrate advanced features into mobile apps.

Summary:

Covers mobile platforms and development tools. Topics include UI design, databases, sensors, location services, multimedia, and AI integration.

System and Network Administration (Unit Code: 11514.2)

Credit Points: 3

Workload Breakdown:

- - Lectures & labs: 45 hours
- - Assignments, quizzes, and study: 105 hours

Learning Outcomes:

- - Administer enterprise-level systems and networks.
- - Implement security and performance tuning.
- - Troubleshoot and maintain IT infrastructure.

Summary:

Provides hands-on experience in IT infrastructure setup and management. Includes system installation, configuration, user and network management, and security.

Information & Communication Technology Project (Unit Code: 9785.2)

Credit Points: 6

Workload Breakdown:

- - Workshops & stakeholder meetings: 40 hours
- - Project planning, execution, and reporting: 260 hours

Learning Outcomes:

- - Plan and execute ICT projects professionally.
- - Engage stakeholders and manage project deliverables.
- - Demonstrate teamwork and ethical conduct.

Summary:

Capstone unit involving real-world ICT projects. Students apply project management, research, and technical skills in teams to deliver solutions.

Network Architecture (Unit Code: 11484.1)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 48 hours
- - Research paper, quizzes, and study: 102 hours

Learning Outcomes:

- - Design and evaluate network architectures.
- - Analyze network components and performance.
- - Apply architectural principles to real-world scenarios.

Summary:

Covers network design and architecture principles. Includes labs, quizzes, and a major research paper with case studies like NBN.

Technology and Engineering Management (Unit Code: 9789.3)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 36 hours
- - Assignments, quizzes, and study: 114 hours

Learning Outcomes:

- - Manage technology projects using industry frameworks.
- - Engage stakeholders and ensure quality outcomes.
- - Demonstrate ethical leadership and decision-making.

Summary:

Introduces project management, innovation strategies, stakeholder engagement, quality assurance, and ethics in technology and engineering contexts.

Enterprise and Cloud Computing (Unit Code: 9281.4)

Credit Points: 3

Workload Breakdown:

- - Lectures & tutorials: 46 hours
- - Assignments, quizzes, and study: 104 hours

Learning Outcomes:

- - Deploy and manage cloud solutions.
- - Evaluate cloud architectures and service models.
- - Address security and scalability in cloud environments.

Summary:

Explores cloud computing concepts, architectures, service models, virtualization, and security. Includes hands-on experience with AWS and cloud tools.

Information Security (Unit Code: 11759.1)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Tutorials: 11 hours
- - Preparation and reading: 33 hours
- - Tutorial work and discussions: 22 hours
- - Security evaluation assessment: 40 hours
- - Final assessment: 20 hours

Learning Outcomes:

- - Interpret and integrate organizational security practices.
- - Analyze security risks and prepare reports.
- - Design security requirements for IT systems.

Summary:

Examines threats and vulnerabilities in IT systems using a risk management approach. Covers policies, standards, cyber threats, and contingency planning.

System Software (Unit Code: 11489.1)

Credit Points: 3

Workload Breakdown:

- - Lectures: 24 hours
- - Tutorials: 22 hours
- - Weekly study commitment: 24 hours
- - Preparation for quizzes: 34 hours
- - Assignment: 40 hours
- - Assignment evaluation quiz: 6 hours

Learning Outcomes:

- - Describe structures and implementation of operating systems.
- - Manage hardware and software resources.
- - Apply concurrency and system administration principles.

Summary:

Introduces operating system design and implementation. Covers processes, threads, concurrency, scheduling, memory management, I/O, file systems, and security.

Matheus Neves Soares Pereira, born 09 February 2004, completed their course in 19 November 2024. They were conferred on 10 December 2024.

Yours sincerely,

Martin Drinkwater
Director
Student Connect
These details were correct as at 3 July 2025