Course Title:	**Software Quality Assurance**
Course Code:	**ENSE707**
Descriptor Start Date:	**01/01/2026**
POINTS:	**15.00**
LEVEL:	**7**
PREREQUISITE/S:	**ENSE706**
COREQUISITE/S:	**NONE**
RESTRICTION/S:	**NONE**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Introduces software quality concepts, motivating the concern for software quality, and highlighting its impact. An overview of the stakeholders, methods, quality metrics and tools are given. Process assurance and product assurance are introduced and distinguished from quality control.

LEARNING OUTCOMES

1. 1. Analyse process and product quality requirements for a software engineering project (a,b)
2. 2. Recommend quality goals and measuring techniques for the quality assurance of a software engineering project (a,b)
3. 3. Evaluate the quality of the software development process (a,e,h,j)
4. 4. Apply product quality assurance techniques to artefacts produced in a software development project (a,e,h)
5. 5. Discuss the implications of quality assurance in software engineering (a,d,f)

CONTENT

• Definitions of software quality
• Society's concern for quality
• The costs and impacts of bad quality
• A cost of quality model
• Quality attributes for software (dependability, usability (including cultural perspectives), and safety)
• Roles of people, processes, methods, tools, and technology
• The nature of process assurance
• Quality planning
• Process assurance techniques
• The nature of product assurance
• Distinctions between assurance and V&V
• Quality product models
• Root cause analysis and defect prevention
• Quality product metrics and measurement
• Assessment of product quality attributes (e.g. usability, reliability, and availability)

LEARNING & TEACHING STRATEGIES

A range of teaching and learning strategies may include lectures, tutorials case studies, computer simulations, and online learning.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Mid-Project Report	20.00	1-4
Final Project Report and Presentation	40.00	1-5
Test	40.00	1,3

Grade Map **MAP1**

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

To pass this course, students must achieve a minimum overall grade of C-.

LEARNING RESOURCES

A recommended reading list will be supplied.

For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme: **AK3751, Bachelor of Engineering (Honours)**

Related Programme/s: