



**SCHOOL OF ARCHITECTURE, COMPUTING & ENGINEERING**

**Submission instructions**

- Cover sheet to be attached to the front of the assignment when submitted
- Question paper to be attached to the assignment when submitted
- All pages to be numbered sequentially
- All work has to be presented in a ready to submit state upon arrival at the ACE Helpdesk. Assignment cover sheets or stationery will **NOT** be provided by Helpdesk staff

<b>Module code</b>	<b>CN7021</b>		
<b>Module title</b>	<b>Advanced Software Engineering – ASWE</b>		
<b>Module leader</b>	<b>Hisham AbouGrad</b>		
<b>Assignment tutors</b>	<b>Bilyaminu Auwal Romo, Aloysius Edoh, Rawad Hammad, Abdulrazaq Abba, Umaima Haider, Reena Popat, Mayank Trivedi, Abdul Qadoos, Manasa Yegamati, Ashna Sabu, Chinnammai Mannam, Aadithya Nalannadiyil Sukumar, Emmanuel Favour Iyehen, Fiza Riaz</b>		
<b>Assignment title</b>	<b>Coursework: Group Assignment</b>		
<b>Assignment number</b>	<b>One</b>		
<b>Weighting</b>	<b>50%</b>		
<b>Handout date</b>	<b>16<sup>th</sup> of October 2025</b>		
<b>Submission date</b>	<b>22nd December 2025 until 23:59 (online submission)</b>		
<b>Learning outcomes assessed by this assignment</b>	<b>1 – 8 in the Module Guide</b>		
<b>Turnitin submission requirement</b>	<b>Yes</b>	<b>Turnitin Grade Mark feedback used?</b>	<b>No</b>
<b>UEL Plus Grade Book submission used?</b>	<b>No</b>	<b>UEL Plus Grade Book feedback used?</b>	<b>No</b>
<b>Other electronic system used?</b>	<b>No</b>	<b>Are submissions/feedback totally electronic?</b>	<b>Yes</b>
<b>Additional information</b>			



**Form of assessment:**

☒ Individual work      ☒ Group work

For **group work** assessment which requires members to submit both individual and group work aspects for the assignment, the work should be submitted as:

☒ Consolidated single document      ☐ Separately by each member

**Number of assignment copies required:**

☒ 1      ☐ Other ☐ Other

**Assignment to be presented in the following format:**

Online submission	<input checked="" type="checkbox"/>
Stapled once in the top left-hand corner	<input type="checkbox"/>
Glue bound	<input type="checkbox"/>
Spiral bound	<input type="checkbox"/>
Placed in a A4 ring bound folder (not lever arch)	<input type="checkbox"/>

**Note:** To students submitting work on A3/A2 boards, work has to be contained in suitable protective case to ensure any damage to work is avoided.

**Soft copy:**

- ☐ (to be attached to the work in an envelope or purpose made wallet adhered to the rear) adhered to the rear)
- ☐ wallet adhered to the rear) adhered to the rear)
- ☒ Soft copy not required

**Note to all students**

Assignment cover sheets can be downloaded from logging into UEL Direct via the following pathway.

**UEL Direct** → **My Record** → **My Programme** → **Assessment log dates with Barcoded Frontsheet**

*All work has to be presented in a ready to submit state upon arrival at the ACE Helpdesk. Assignment cover sheets or stationery (including staplers) will **NOT** be provided by Helpdesk staff. This will mean students will not be able to staple cover sheets at the Helpdesk.*

## Group Work Assignment – 50%

**Please read the whole assignment to ensure you understand all the requirements before you begin.**

This assessment can be attempted in groups of up to **4 students**. These groups will be managed by the module leader and tutor/s.

You must keep regular minutes of any meetings that you have while undertaking this coursework, as they will be required if there is a dispute about any member's contribution. Your minutes should:

- be dated
- include a list of all group members present and apologies for any absences
- include allocation of work to be achieved by each member by the next meeting
- include the time, date and venue of the next meeting
- be signed to indicate the agreement of all group members, present or not.

You are required to submit with your assignment a statement signed by each member of the group stating that you have all participated almost equally, and therefore, the mark awarded should be shared equally, **without this statement marks cannot be allocated**. The original of this agreement goes to your tutor, and an electronic copy goes in your assignment. Refer to the attached template.

In the event of a dispute about a particular member's contribution to the coursework, you should make an appointment with your tutor and/or the module leader no later than **1 week** before the submission date. All group members will be required to attend this meeting. Your tutor and/or the module leader reserves the right to alter an individual's grade in light of any evidence of unequal contribution. It is envisaged that such occurrences will be rare.

All individuals will receive the group grade for this coursework unless clear evidence is provided of unequal contributions.

The marking criterion for the coursework is based on the assessment criteria at the end.

## Component 1: Coursework - Group-based project (50%)

### Required tasks:

You are required to select an existing **open-source software project or product** and develop an enhanced version that demonstrates measurable improvement to its existing functionality. The goal is to apply the **advanced software engineering principles and techniques** covered in this module — such as software architecture design, testing strategies, refactoring, version control, and continuous integration — to produce a technically sound and well-documented improvement. Your work must be accompanied by a **comprehensive report (3,000 words  $\pm 10\%$ )**, following the provided template, that critically analyses the project's current state, identifies limitations or enhancement opportunities, and justifies the specific features or modules your team has implemented. The report should also discuss the design rationale, applied methodologies, implementation process, testing procedures, and outcomes. You are expected to use a **version control system** (e.g., GitHub or GitLab) to document your development process, including commits, branches, and collaborative contributions, as part of your submission evidence. Importantly, modifications limited to the interface or user interface (UI) will **not** qualify as new features or functionalities; only substantive technical changes — such as new modules, algorithms, integrations, or improved performance mechanisms — will be assessed. Tutors may suggest a shortlist of suitable open-source projects, but you are encouraged to demonstrate initiative in selecting and justifying a project that aligns with the learning outcomes and reflects the advanced engineering practices explored throughout this module.

### Instructions:

This component consists of a **group-based project**; each group has **3 or 4 members**. This coursework was designed keeping the group size in mind, and the size will be managed by the module leader and tutors (exceptional circumstances might be considered). You will be required to designate a **group leader**. It is vital that each group nominates a group leader as early as possible, because the group leader will be responsible for all group communication with the lab tutor and module leader, as well as the final submission of the work to Moodle and provide confirmation (acknowledgement) to the group members by email with the submitted Group Report.

Please note that group communication should only be done through the group leader unless there are exceptional circumstances.

The deadline for finalising your group is by the end of **Week 3**. **Groups can be found on the module Moodle site or through your tutor.**

Please include **Student ID, Full Name and timetable group number** (i.e., seminar group) for each member of the group and clearly identify the group leader.

If you are not in a group by the **deadline**, you will be randomly assigned to one.

Final list of groups along with details each member will be published on CN7021 Moodle page site: this will be the **final** official allocation and will be strictly followed.

The deadline for deciding on your group leader and project topic is **Week 4**.

### Each group is required to submit the following:

1. A web link to a UEL OneDrive folder containing all the project source code and any additional material (images, configuration or read me files). Alternatively, you can provide the link to an open code repository (bitbucket or GitHub), as long as it is freely accessible.
2. Project submission report via Turnitin submission link in MS Word or PDF file format.
3. Contribution/s of each group member in a **Contributions Table**. This must be highlighted in the report **appendix section**, stating who has done what: each group member is required to contribute to the project equally and coursework report, as well as **submit all tutorials' tasks in a Word document file format**. This has 15 marks from the report total of 50 marks.

The report must be structured according to a template provided on Moodle.

- Request **formative feedback** during tutorial in **week 7** from your lab tutor to show the current status of the project (introducing the problem, show a draft architecture, and use case diagram with some requirements, software metrics and cost estimation);

## Coursework Marks Distribution

Required Items		Marks	Due Date
1.	Source Code & additional functionalities documentation	20 marks	22nd December 2025
2.	Report: COCOMO, Project Management Documentation, software metrics, Cost estimation of your choosing software project, with tutorials in a file.	50 marks	22nd December 2025
3	Quality of Report and Harvard Referencing	30 marks	22nd December 2025

Submission **Deadlines** will also be published on the module Moodle site.

## Resit Assessment

If you do not pass your module at the first attempt, you will have an opportunity to resubmit your practical tasks and/or take a re-sit exam. The mark for all re-sits is capped at 50%.

## LATE SUBMISSIONS

You should aim to submit all coursework by the deadline set. Meeting deadlines is an essential employability skill, and an expectation for your course. Should you be unable to submit your assignments on time, one of the following may be available:

- **You may submit coursework up to 24 hours after the deadline.** Work submitted within 24 hours of the deadline will be subject to a fixed penalty of 5% of the total marks available (as opposed to marks obtained). Please note that if you submit **both** before the deadline **and** during the 24-hour late period, then the second submission will be marked and 5% deducted. [Students submitting at resit will not be eligible to submit 24 hours late.](#)
- **You may be able to request an automatic 7-day extension.** You have two opportunities to request automatic extensions in one academic year (one per term). [Follow this link to find out more about how to request an automatic extension.](#)

These rules normally only apply to coursework. It does not apply to examinations, presentations, performances, practical assessments or viva voce examinations. If you are unable to take advantage of these opportunities, then you will need to apply for **extenuating circumstances**, or accept that you will receive a zero mark.

Extenuating Circumstances are circumstances which:

- impair your examination performance prevent you from attending examinations or other types of assessment, or
- prevent you from submitting coursework or other assessed work by the scheduled deadline date, or within 24 hours of the deadline date

Such circumstances rarely occur and would normally be:

- **unforeseeable** - in that you could have no prior knowledge of the event concerned, and
- **unpreventable** - in that you could do nothing reasonably in your power to prevent such an event, and
- expected to have a **serious impact** on performance

[You can make an application for extenuating circumstances by following this link.](#)

## **Plagiarism**

The University defines an assessment offence as any action(s) or behaviour likely to confer an unfair advantage in assessment, whether by advantaging the alleged offender or disadvantaging (deliberately or unconsciously) another or others. A number of examples are set out in the Regulations and these include: "D.5.7.1 (e) the submission of material (written, visual or oral), originally produced by another person or persons, without due acknowledgement, so that the work could be assumed the student's own. For the purposes of these Regulations, this includes incorporation of significant extracts or elements taken from the work of (an) other(s), without acknowledgement or reference, and the submission of work produced in collaboration for an assignment based on the assessment of individual work. (Such offences are typically described as plagiarism and collusion.)" The University's Assessment Offences Regulations can be found on our web site. Also, information about plagiarism can be found on the programme's handbook.

## **Formative Feedback**

You have the opportunity to submit tasks at designated milestones during the running of the module to receive formative feedback from your tutor during labs.

The feedback is not grading the work. It is designed to help you develop areas of your work, and it helps you develop your skills as an independent learner and overall group (team). These opportunities are only open up to one week before the deadline date.

Informative feedback allows you to reflect on the instructor's recommendation and draft your final submission.

## **Guidelines**

You **MUST** underpin your critical analysis and evaluation of the key issues with appropriate and wide-ranging academic research and ensure this is referenced using Harvard referencing system. My Study Skills Area contains the following useful resources:

Guide to Harvard Referencing and citations:

- <https://www.uel.ac.uk/sites/default/files/6475.pdf>
- <https://www.uel.ac.uk/study/student-life/library-archives-learning-services/info-skills-guides/referencing-information>

**You must use the UEL Harvard Referencing method in your assignment.**

## Agreement of Participation – Group Assignment CN7021

Please complete this agreement and keep a copy for each member of your group. The original of this agreement goes to your tutor, and the Electronic copy goes in your assignment.

We agree to work as **a group of . . .** to complete the coursework for CN7021 and understand that the grade awarded will be the grade allocated to us individually as a result of our group work.

Student ID.	Name in capital letters and Email Address	Signature

**Note: Students should form their groups (a group of 4) within the SAME Tutorial / Practical.**

Tutorial / Practical Number: \_\_\_\_\_

Tutor's Name: \_\_\_\_\_

Date of agreement \_\_\_\_\_

## Assessment Criteria

Each of the four elements in the short report will be marked using the following scale:

Short Report elements – Assessment Criteria	Grade Band
Excellent coverage of issues with good exemplification and a complete list of references along with Turnitin report.	70-100% <b>Excellent</b>
Good coverage of issues with some relevant exemplification with adequate references.	60-69% <b>Good to Very Good</b>
Adequate coverage of issues with little exemplification	50-59% <b>Satisfactory to Good</b>
Unclear coverage of issues but little exemplification	40-49% <b>Fairer to Overall Fail</b>
No relevant material or very little relevant material	0-39 <b>Fail</b>

Deliverable – Software Solution Diagrams	Grade Band
There is a clear indication in the answer that students have fully understood the problem domain and spent a considerable amount of time iterating over different solutions. All relevant actors and use cases have been identified and their relationships clearly shown. Documentation is to a professional standard.	70-100% <b>Excellent</b>
Most of the relevant actors and use cases have been identified. Any assumptions will be justified in the context of the case study and problem domain. Documentation will be of a high standard and there will be evidence of iteration.	60-69% <b>Pass standard to satisfactory</b>
About half of the actors and use cases have been identified and there will be no redundant use cases. The standard of documentation is satisfactory. Evidence of iteration will be patchy.	50-59% <b>Satisfactory to Good</b>
Very little or no iteration. There may be a number of redundant use cases. The standard of documentation is generally weak.	40-49% <b>Fairer to Overall Fail</b>
Significant errors and misunderstandings. Actors and use cases have not been identified correctly. The level of detail is inappropriate. Documentation is poor. Task not attempted or incomplete or fails to identify the most obvious points.	0-39 <b>Fail</b>