**COMP3000 Computing Project**

**40 CREDIT MODULE**

**ASSESSMENT: 80% Coursework**

**20% Practice**

**MODULE LEADER: Dr Vassilis Cutsuridis**

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**SUPERVISORS: Dr Amir Aly, Prof Nathan Clarke, Dr Bogdan Ghita, Dr Hai-Van Dang, Dr Vasilios Kelefouras, Dr Ji-Jian Chin, Dr Lauren Ansell, Dr Rory Hopcraft, Dr Haoyi Wang, Dr Vivek Singh, Dr Muhammad Asad, Dr Shaymaa Al Jubouri, Dr Fatma Bouabdallah, Dr Nancy Girdhar, Dr Vassilis Cutsuridis**

**MODULE AIMS**

* To enable the student to undertake an individual project on an approved topic of interest, which addresses a significant computing-related problem relevant to the programme of study.
* To provide an opportunity for the student to integrate many of the threads of their programme of study

**ASSESSED LEARNING OUTCOMES (ALO):**

1. Demonstrate an investigative component to the project showing consolidation and development of knowledge and understanding relevant to their programme of study.
2. Analyse a significant computing related problem, including an examination of relevant existing approaches, and produce an approved deliverable appropriate to the programme of study that addresses the problem.
3. Manage the project effectively by demonstrating the application of project management skills.
4. Identify and take due consideration of the legal, ethical, social and professional issues that are appropriate to the project.
5. Communicate effectively all aspects of the project deliverables including the theoretical and methodological framework.
6. Evaluate the success of the project in terms of the deliverable and their approach.

# OVERVIEW

This document provides information regarding the assessment requirements for the *COMP3000* *Computing Project* module.

For this module you will apply the complete software development lifecycle to a given problem. Students should choose to apply themselves to the topic area related to their degree. They may write a game, focus on a security problem, or consider an application of artificial intelligence. Security students must focus on Security-related topics. Research projects can be considered but they must contain some element of empirical software engineering alongside a research output, such as a paper. In short, you must write some quality code and evaluate it with rigor.

Your project title must reflect your degree.

The module is assessed via two elements, 80% coursework and 20% practice. You must achieve an overall module grade of 40% to pass the module.

This is an individual piece of work.

The sections that follow detail the assessment tasks that are to be undertaken. All assessments are to be submitted electronically via the module DLE page before the stated deadlines. Please check the DLE dates. Submission points will be available as time progresses through the year.

The assessment requirements will be presented during the initial seminar to provide further clarity over what is expected and how you can access support and feedback.

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| --- | --- | --- |
| Description | Submission Deadline | Feedback |
| 01 Supervisor Selection | **11th October 2024 3pm** | By 18th October 2024 – final notification of supervisor |
| 02 Project Initiation | **25th October 2024 3pm** | During scheduled stand-ups |
| 03 Poster & Description | **21st March 2025 3pm** | During scheduled stand-ups |
| 04 Project Portfolio Complete | **28th April 2025 3pm** | Within 20 working days |
| Showcase | **1th May 2025 9:00-14:00** | At posters |
| 05 Viva | **W/C 5th May 2025** | At the end of the Viva |

This project requires the delivery of a portfolio of work. The portfolio comprises a set of interim deliverables, 02 Project Initiation Documents, 03 Poster and Description, 04 a final project report, and a version-controlled repository containing your code. The portfolio will be scrutinised in part 05 a final viva.

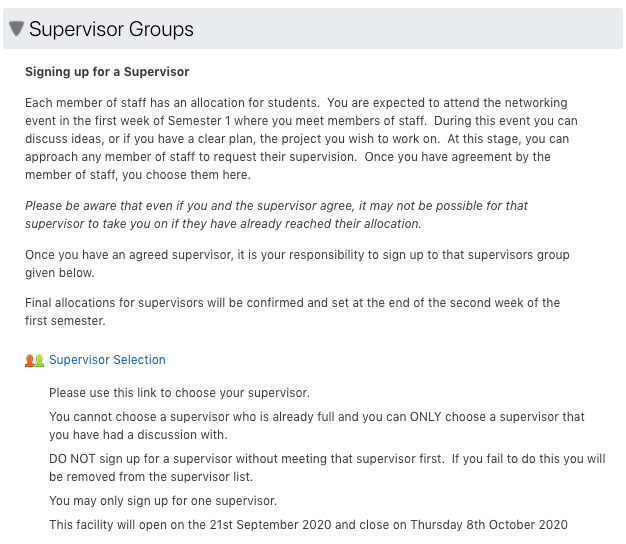
Students are requested to produce their products under a creative commons license, however if you are working with a client or wish commercial sensitivity for your project then you are free to choose an alternative. Ensure you discuss this with your supervisor.

Further details of the deliverables are provided below.

## 01 Supervisor Selection

During the first two weeks of the module, you have the opportunity to formulate your own ideas for your project supported by the opportunity to talk to different potential supervisors. There will be an initial seminar set up in the first week of the module where you can have those discussions. You may also make arrangements to meet and discuss your ideas during these initial weeks with potential supervisors.

Once you have a clear idea of who you would like to be your project supervisor, you must gain their agreement and sign up to their group on the DLE using the link “Supervisor Selection” illustrated in the figure below. This link will only be accessible after the set-up meeting.



You must have completed your selection by the date specified. You will NOT be able to access this facility after the deadline date and time!

Students who have not signed up to a supervisor by the cut-off date will be randomly allocated to a supervisor in the week after the selection process closes.

## 02 Project Initiation

This deliverable is the output from the culmination of your sprint zero. Sprint zero should be spent getting yourself ready for delivering the project. You should identify the point and purpose of your project. This will require you to think of a title and work up a project Vision. Please do not consider that your project title and project vision are immutable – they can change as you develop your ideas. However, you need to know at the start roughly where you want to develop your ideas. By ensuring you start with a coherent project title and project vision, you can ensure you start in an organised fashion.

Sprint zero should also be about deciding which languages and technologies to use, setting up your development environment, sorting out your version-controlled repository, identifying your test environment, identifying the things that could go wrong and creating your initial product backlog. The product backlog will be an evolving, living item that changes and evolves as the project progresses. However, you need to ensure that there is enough in the product backlog to begin with. You should also include a high-level plan to show roughly when you intend to complete certain things – a recommended format would be a Gantt chart. Please refer to the documentation on the DLE around project management to help you with this.

You should use appropriate project management tools such as a planner and a diary. Being able to use a diary and control your time is an essential part of being a professional.

Students need to use GitHub. Ensure you add your supervisor to your repository and edit the readme.md file so that your project title, vision and allocated supervisor are clearly noted. Make sure the name of the repository reflects your name.

This is the stage where you must also give some consideration as to the potential for things to go wrong. Please read around the topic matter and identify what pertinent risks there might be to your project. Once you have identified what could go wrong, you need to consider the likelihood of that happening and what you will do about it. Any risks that have a high likelihood and a high impact MUST have actions identified to prevent them should the events happen.

## 02 Submission details

Use the *02.1 P1 template* for your initial deliverable. Remember to delete the grey text and replace it with your own words. The grey text is there for guidance, not for submission. Save your document as a PDF prior to uploading. No other document format is accepted.

## 03 Showcase Materials (Poster and Description)

The project showcase is an important event in terms of ensuring student work gets good visibility with potential employers. Computing academics have many contacts in industry and those contacts are keen to see the work carried out by final year students.

Attending the showcase is mandatory. Contributions to it are marked in the practice section and are indicated in the marking schema. The date of the showcase itself is in your timetable for the module, most likely, in early May.

In preparation for the showcase, you must prepare your project title, project vision, produce a poster and a thumbnail image. These materials must be prepared even if you decide that you do not wish to share your project on the online Project Showcase website. You must attend the Showcase day or marks will be reduced.

The poster should be based on your project vision and provide the reader with a glimpse into how you are applying the technology to solve the problem you have identified. The purpose of the poster is to provide enough information so that somebody can understand what your project is about and an indication as to how you are putting your software together. It does NOT require you to have completed your software.

## Submission details

Submissions are via the DLE and will go on to the Showcase website if you are choosing to share your poster and description. Details are entered via an online form and the poster and thumbnail files are uploaded via the same entry.

Graphical user interface, text, application

Description automatically generatedGraphical user interface, application

Description automatically generated

Drag and drop your files here

You should submit the following information:

* Project Title
* Project Description (this should be your project vision from your Project Initiation)
* Keywords (again can be taken from your Project Initiation)
* Your poster file in jpg format, landscape orientation and filesize smaller than 2M. File to be named with your student ID eg: 123456.jpg.
* Your thumbnail file in .jpg format. Landscape orientation and filesize smaller than 2M. A thumbnail is a smaller resolution file that gives the overall impression of the main poster file. It is used to help the webpages load quicker and therefore would usually be much smaller than the poster itself (perhaps 100k). You could create one using ‘Snipping Tool’ in Windows or use the hint below.

You can create your poster using Office 365 Powerpoint. Save as a jpg file.

A useful tip for anybody using Windows 10/11. The pre-installed Photos app can resize your jpg poster file for you. Open your poster in this app, right click and select Resize. Choose the option for “Best for profile pictures and thumbnails”. This will save a copy of your poster in the jpeg format.

## 04 Project Portfolio

Your overall project portfolio will consist of a number of items detailed below.

1. A version-controlled repository with organised code and an informative readme.md. Your report submission must contain a link to your repository and your markers must have access at the date of final submission. Obviously, your code should work for high marks.
2. A poster illustrating your project. You may change your poster from the submission in part 3 following formative feedback from your supervisor.
3. A thumbnail file of your poster. See the point above.
4. A working instance of your software to be shown in your video and during your demo. This will form part of your practice submission for this module.
5. A 5-minute video (+-10%) showing the top-level highlights of your software. This also forms part of your practice submission for this module.
6. A 10,000-word-report documenting your project and the processes that supported the development of your project. This is a substantial piece of writing that should be drafted, redrafted and worked on over a period of time, not left until the last minute.

Your report and video will be submitted using the appropriate links on the DLE page. The poster and thumbnail should be submitted as described in section 03. You may edit or change the project title, description, keywords, poster and thumbnail files via the 03 submission link prior to the final project portfolio date.

The COMP3000 DLE page contains material at the bottom on the topic of how to create a good poster. Prizes are awarded for best posters.

## 04.1 Video

You are to submit a link to a YouTube video that you have created where you discuss the following:

1.  The background to your project.  Explain to the viewer the context so they understand what you were aiming to achieve. Consider the following questions to help elaborate the background:

* Why were you looking at this?
* What were the issues that needed solving with software?
* Who will benefit from this system?

2.  Show the key features of your system. Show it running. Show off the aspects you are most proud of.

3.  Whilst the video must be narrated by yourself, it is not essential for you to appear in the video.

***Video Settings:***

|  |  |
| --- | --- |
| **File-Type:** | MP4 |
| **Resolution:** | 720 or 1080 |
| **Framerate:** | 30 |
| **Video Bitrate:** | 16 MBS |
| **Audio Bitrate:** | Mono – 128 kpbs, Stereo – 384 kpbs |
| **Compression:** | H.264 |

You can use Panopto to record or make use of the free [OBS software here](https://obsproject.com/) if you do not already have your own. Please refer to the Support materials on the DLE for information on creating videos with Panopto.

## 05 Project Video and Viva

The 5-minute video is submitted as part of your project portfolio (as mentioned above) but is assessed within the practice part of the module. Failure to attend your project viva will result in the failure of the whole module.

The final part of the module is a project viva that will take a maximum of 30 minutes. During this session you should provide a 10-minute presentation to two examiners. The presentation should not cover in depth what has already been shown in the video but cover any part of the application in more depth that is required. The remaining time will be for questions and feedback.

# COURSEWORK 01 (CW1) – Product and Report 80%

This part of the assessment scrutinizes the quality of your product, project planning, report content, and critical reflection.

Marks will be based on the report content, the final code/product submission, and the supervisor’s experience of you working on your project. Details can be found in the marking rubric.

# PRACTICE 01 (PW1) – Poster, Viva & Video 20%

This part of the assessment scrutinizes your ability to present your work in various forms: as a poster, a video, your report, and by your performance in the viva.

Marks will be based on the representative aspects of your portfolio and presentations. Details can be found in the marking rubric.

# MARKING CRITERIA: Coursework – 80% (CW1)

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|  | **Level descriptors.**  *Note that these definitions are indicative of expected standards at each level, and may not be precise descriptors of the project submitted.* | | | | | | |
| **Category and marks weighting:** | <30% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-100% |
| **Project definition & planning (10%)** "Scene setting" & defining the project aims & objectives, considers the problem domain and/or research question/task/problem (aims & objectives).  Producing, adhering to and iteratively updating a structured project plan, considering time, resources, cost & ethics. Project vision is clear. Sprint plans map to backlog and aims. Releases planned every two weeks with appropriate plans and reviews. | Task totally unclear, undefined &/or irrelevant. | Inadequate task definition; very poorly defined. | Task definition under-developed; vague &/or illogical. | Task clarity &/or validity could improve. | Clear and sensibly defined task. | Task very well defined, explained and justified. | Perfect task definition; concise, compelling, SMART. |
| Little/no evidence of having prepared or followed a structured project plan. | Inadequate project planning; tasks vague &/or illogically planned. | Some project planning and logic but needs much more thought, detail &/or clarity. | Project mostly well planned & managed. Some questionable logic &/or may lack detail. | Project generally well planned and managed. | Clear and logical project planning; dynamic response to setbacks/new discoveries. | Professional project management throughout all stages of the project. |
| **Context review & subject knowledge (15%)** Presenting a review of published literature that is relevant to this study with appropriate critical comment. OR presents a review of context of problem with appropriate critical comment. Using correct and appropriate citations throughout the report. Showing a clear understanding of relevant subject matter throughout the project. Legal, Social, Ethical and Professional issues clearly and appropriately discussed along with appropriate critical comment and authoritative citations. | Little/no review of appropriate literature. | Minimal literature review. No critical comment; serious gaps/omissions. | Some literature review; little attempt at critical comment. Large gaps and omissions. | A range of relevant literature reviewed; some omissions. Some valid critical comment. | Appropriate breadth & depth to literature review; minor gaps. Good critical comment. | Comprehensive and very well written literature review with valid critical review throughout. | Comprehensive literature review: peer reviewed journal standard. |
| Missing/irrelevant list of references. Absence of valid citations throughout report. | Superficial reference list &/or predominately incorrect/inadequate citations. | Reference list present. Major presentation issues &/or poor citation style. | Reference list &/or citations could be more clearly/correctly presented. | Most citations & reference list entries correctly presented; some minor issues. | Highly competent use of citations and reference list. | Extensive list of references & citation style: peer reviewed journal standard. |
| Little/no evidence of under- standing of relevant subject matter throughout the project. | Inadequate understanding of relevant subject matter; confused &/or lacking depth. | Some understanding of subject matter with errors &/or poor conceptual framework. | Reasonable understanding of subject matter; minor errors. May require more depth. | Good understanding of subject matter with a clear conceptual framework. | Excellent understanding of subject matter beyond the level of taught modules. | Expert understanding of subject matter with rigorous attention to relevant detail. |
| Little or no evidence of understanding of appropriate LSEP issues. | Inadequate understanding of relevant LSEP issues. Vague mentions made with little demonstrable understanding | Some understanding of LSEP issues with errors &/or poor conceptual framework. | Reasonable understanding of LSEP issues; minor errors. May require more depth. | Good understanding of LSEP issues with a clear conceptual framework. | Excellent understanding of LSEP issues beyond the level of taught modules. | Expert understanding of LSEP issues with rigorous attention to relevant detail. |
| **Project methodology and implementation (50%)** Defining an appropriate methodology and discussion of alternatives. Implementing the methodology to a depth appropriate for a 40 credit module. Demonstrating appropriate skills in the implementation of that methodology; skills depend on type of project (experimental, creative, mathematical, computational, etc.) Implementation of agile artifacts match proposed plans earlier or deviation from plan discussed appropriately. Implementation of code at appropriate level with demonstration of good software engineering principles. eg. DRY, YAGNI, SOLID. | Absence of anything that could reasonably be called a methodology. | Little/no justification for methodology &/or inappropriate methodology. | Some lack of logic/depth in justifying methodology. Major flaws in method selected. | Reasonable justification & selection of methodology with some flaws/errors/omissions. | Sensible, justified methodology selection with minor limitations. | Appropriate, well justified methodology selected. Good awareness of limitations. | Expertly justified; optimum methodology selected with due regard for limitations. |
| Little or no relevant work done to achieve project aims & objectives. | Minimal relevant work done to achieve project aims & objectives. | Some relevant work but far short of that expected in the time allocated for 40 credits. | Project engagement &/or depth of coverage of task could improve. | Good project engagement and coverage of the task. | Good depth of coverage of the task, showing a high level of project engagement. | Comprehensive coverage of a highly demanding task. Very high level of engagement. |
| Little or no evidence of relevant skills in project implementation. | Poor skills in implementing the methodology - incorrect &/or very confused. | Some skill in implementing the methodology, but with errors &/or confusion. | Skill in most areas of methodology implementation - some issues/errors. | Competent implementation of methodology with minor issues/errors. | Highly skilled implementation of methodology (far beyond the level of taught modules). | Expert level of skill in all relevant areas clearly evident throughout. |
| Little or no evidence of implementation of agile project management | Minimal relevant work done to implement agile. | Some relevant work but far short of that expected for an agile project | Agile engagement &/or depth of coverage of task could improve. | Good agile application and coverage of the task. | Good depth of coverage of agile, high level of engagement with theory leading to good implementation. Agile worthy of commercial environment | Comprehensive coverage of a highly demanding agile implementation. Very high level of engagement. |
| Little or no evidence of coding skills in project implementation. | Poor skills in implementing code - incorrect &/or very confused. | Some skill in implementing the software, but with errors &/or confusion. Application provides more functionality than log in and registration. | Skill in most areas of software implementation - some issues/errors. Implementation of moderate complexity with suitable functionality demonstrated. | Competent implementation of software with minor issues/errors. Application is of suitable complexity, has appropriate storage for any data, architecture is not monolithic but demonstrates interactions between levels and/or layers of software. | Highly skilled implementation of software (far beyond the level of taught modules). Application and architecture have good complexity, and good quality software engineering. Data storage if required is good, application goes way beyond a form of data storage with front end. | Expert level of skill in all relevant areas clearly evident throughout. Software is of commercial quality and could be implemented in real world situation with very little modification. OR research of quality that could easily lead to publication. |
| **Critical evaluation & conclusions (15%)** Appropriate mathematical/statistical methods to process & present data if appropriate. Software testing, verification and validation appropriate. Discussion/critical evaluation of results. Drawing the results together to form clear conclusions linked to the project aims and objectives (quantitative if appropriate). Recommendations for further work. | A complete absence of appropriate data analysis. | Fundamentally flawed or inappropriate data analysis/processing. | Some relevant data analysis/processing with major issues/errors. | Appropriate data analysis/processing with some issues/errors. | Competent data analysis/processing with minor issues/errors. | Highly competent data processing/analysis & treatment of uncertainty. | Expert mathematical data processing; skilful error/sensitivity analysis. |
| Project is devoid of appropriate testing plan | Poor skills in applying testing, incorrect &/or very confused | Some relevant testing applied. V&V superficial, sparse &/or often flawed | Appropriate testing in place but with some omissions, issues &/or errors | Competent testing plan in place. Appropriate Validation and Verification approach in place. | Highly competent testing regime in place both in plan and implementation. Shows a deep understanding of testing above and beyond taught modules. | Expert testing plans and implementations in place, could be appropriate for commercial application with very little modification. |
| Project is devoid of critical analysis & evaluation. | Poor critical awareness showing little understanding of project results. | Critical evaluation is superficial, sparse &/or often flawed. | Appropriate critical evaluation in some areas with some omissions, issues &/or errors. | Competent critical evaluation in most areas of the project. | Highly competent critical awareness showing a good understanding of results. | Expert critical analysis throughout, showing deep understanding of results. |
| Absent/irrelevant conclusions. | Inadequate/unjustified conclusions. | Conclusions vague and/or largely unjustified. | Relevant conclusions. Accuracy, evidence &/or clarity could improve. | Logical conclusions predominantly evidence-based and clearly presented. | Appropriate, well presented and well justified conclusions. | Clear, concise and fully quantitively justified conclusions. |
| **Structure and presentation (10%)** Structuring the report such that it is easy to follow, with information delivered in the right order, to an appropriate level of detail.  Using appropriate grammar and language. Clearly presenting any mathematical work. Using appropriate, clear figures, images and graphs with correct labels, units, titles, etc. | Little or no coherent report structure. | Structure lacks logic - rather "thrown together". | Some structure but disjointed/confusing. | Structure reasonable but could be easier to follow. | Sensible structure with minor issues/errors. | Excellent; clear and logical structure. | Faultless structure - perfectly presented. |
| Writing &/or mathematical notation incomprehensible. | Inappropriate written work &/or mathematical notation. | Poor literacy &/or mathematical notation. | Mainly appropriate style of writing and mathematical presentation - could improve. | Clear style of writing and mathematical presentation. | Lucid style of writing. Clear, unambiguous mathematical presentation. | Literacy/mathematical presentation: peer reviewed journal standard. |
| Images/graphs/figs sparse, illegible &/or irrelevant. | Images/graphs/figs do not convey required information. | Most images/graphs/figs convey req'd info but may lack clarity &/or contain errors. | Mainly appropriate images/ graphs/figs - aesthetics &/or labelling could improve. | Most images/graphs/figs of high standard; occasional minor errors/issues. | Images/graphs/figs of high standard, clearly conveying all required information. | Creative images/graphs/figs; peer reviewed journal standard. |

# MARKING CRITERIA: Practice – 20% (PW1)

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|  | **Level descriptors.**  *Note that these definitions are indicative of expected standards at each level, and may not be precise descriptors of the project submitted.* | | | | | | |
| **Category and marks weighting:** | <30% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-100% |
| **Communication of information (50%)** The poster should be pitched at an audience that is scientifically literate, but non-expert in this particular subject specialism. The video is for a more specialist technical audience. They should communicate: • The rationale for the project and the project aims (with any essential background information). • What has been done over the course of the project. • A summary of project results/discussion. • The main project conclusions. Viva reflects upon the whole of the project and presents a summary of project results. Video presents highlights for the project and a summary of the project output/results. Poster presents main rationale for the project | Task totally unclear, undefined &/or irrelevant. | Inadequate task definition; very poorly defined &/or explained. | Task definition under-developed; vague, illogical &/or poorly explained. | Task clarity &/or explanation could improve. | Clear and sensibly defined task - well explained. | Task very well defined and explained. | Perfect task definition; concise, compelling and very clearly explained. |
| Little/no explanation of what was done over the course of the project. | Explanation provides little insight into what was done over the course of the project. | Some explanation of what was done - rather vague/confusing. | A useful explanation of what was done - clarity could improve. | A clear explanation of what was done over the course of the project. | A clear, concise and informative explanation of what was done. | Explanation clearly conveys technically demanding project work to non-expert audience. |
| Little/no presentation of project results. | Minimal insight into key project results. | Some presentation of project results - rather vague/confusing. | Useful presentation of project results - clarity could improve. | Clear presentation of key project results. | Key project results are efficiently, creatively and clearly presented. | Innovative presentation of results - appropriate to non-expert audience. |
| Absent/irrelevant conclusions. | Inadequate/unjustified conclusions. | Conclusions vague and/or largely unjustified. | Relevant conclusions. Accuracy, evidence &/or clarity could improve. | Logical conclusions predominantly evidence-based and clearly presented. | Appropriate, well presented and well justified conclusions. | Clear, concise and fully quantitively justified conclusions. |
| Text &/or mathematical notation incomprehensible. | Inappropriate text &/or mathematical notation. | Poor literacy &/or mathematical notation. | Mainly appropriate text and mathematical presentation - could improve. | Clear, concise text and mathematical presentation. | Efficient, appropriate use of text. Clear, unambiguous mathematical presentation. | Text/mathematical presentation of professional poster standard. |
| Images/graphs/figs sparse, illegible &/or irrelevant. | Images/graphs/figs do not convey required information. | Most images/graphs/figs convey req'd info but may lack clarity &/or contain errors. | Mainly appropriate images/ graphs/figs - aesthetics &/or labelling could improve. | Most images/graphs/figs of high standard; occasional minor errors/issues. | Images/graphs/figs of high standard, clearly conveying all required information. | Creative images/graphs/figs; professional poster standard. |
| **Poster structure & aesthetics (25%)** The poster should deliver information in a clear, logical order. It should be aesthetically pleasing and visually exciting. It should not appear too cluttered, but also not too sparse, with a good balance of text and images (such as pictures, graphs, formulae, etc). | No thought given to poster structure or aesthetics. | Very poorly structured poster &/or very little aesthetic appeal. | Poster is not very attractively presented - may be rather messy &/or poorly structured. | Poster is reasonably visually appealing. Might lack some structure &/or tidiness. | Good poster structure and aesthetics. | Poster is effective, attractive and exciting. Very well thought out structure. | A true "work of art" - striking & exciting. Very clearly and creatively structured. |
| Inappropriate amount of content; either far too cluttered or far too sparse. | Little thought to achieving the right balance or quantity of text and images. | Poor balance between text and images &/or quite cluttered or sparse. | Balance of text and images could be better, &/or a bit too cluttered or sparse. | Reasonable balance between text and images - about the right amount of content. | A good balance of text and images - not too cluttered or sparse. | Exactly the right amount of content with excellent balance between text and images. |
| **Viva (25%)** Verbal presentation of the project (what you did, why, and what you discovered). Your response to the moderator's questions should demonstrate a deep understanding of the subject matter and the implications of your results. | Little/no ability to verbally communicate technical information. | Inadequate verbal communication of technical information. | Verbal communication of technical information is very difficult to follow. | Mostly effective verbal communication of relevant concepts/outcomes. | Good verbal communication of relevant concepts/outcomes. | Clear and eloquent verbal presentation of relevant concepts/outcomes. | Expert verbal communication; concepts/outcomes pitched at the right audience level. |
| Little/no coherent response to moderator's questions. | Vague, very confused &/or factually incorrect response to moderator's questions. | Response to moderator's questions shows limited grasp of necessary concepts. | Some sensible responses to moderator's questions - a bit naive &/or lacking depth. | Mostly clear, sensible responses to moderator's questions. | Clear, well-informed response to all moderator's questions. | Comprehensive, expert response to moderator's questions. |

**General Guidance**

**Extenuating Circumstances**

There may be a time during this module where you experience a serious situation which has a significant impact on your ability to complete the assessments. The definition of these can be found in the University Policy on Extenuating Circumstances here:

<https://www.plymouth.ac.uk/student-life/your-studies/essential-information/exams/exam-rules-and-regulations/extenuating-circumstances>

and here

[Extenuating circumstances (sharepoint.com)](https://liveplymouthac.sharepoint.com/sites/x70/SitePages/Extenuating-circumstances.aspx?xsdata=MDV8MDJ8dGhvbWFzLndlbm5la2Vyc0BwbHltb3V0aC5hYy51a3wxNTA3YjU4NjBhOGQ0MTA1OGZjOTA4ZGNkMzQ3ZjY1ZXw1NDM3ZTdlYjgzZmI0ZDFhYmZkM2JiMjQ3ZTA2MWJmMXwxfDB8NjM4NjE3NTUzNzI1NzYyMjY3fFVua25vd258VFdGcGJHWnNiM2Q4ZXlKV0lqb2lNQzR3TGpBd01EQWlMQ0pRSWpvaVYybHVNeklpTENKQlRpSTZJazFoYVd3aUxDSlhWQ0k2TW4wPXwwfHx8&sdata=cWltQUxSZysrMUNYNng0OE1QV1FMbjR2VkV1MTRnRXM1NEpzanZSb0prQT0%3d)

**Plagiarism**

All of your work must be of your own words. You must use references for your sources however you acquire them. Where you wish to use quotations, these must be a very minor part of your overall work.

To copy another person’s work is viewed as plagiarism and is not allowed. Any issues of plagiarism and any form of academic dishonesty are treated very seriously. All your work must be your own and other sources must be identified as being theirs, not yours. The copying of another persons’ work could result in a penalty being invoked.

Further information on plagiarism policy can be found here:

Plagiarism: <https://www.plymouth.ac.uk/student-life/your-studies/essential-information/regulations/plagiarism>

Examination Offences: <https://www.plymouth.ac.uk/student-life/your-studies/essential-information/exams/exam-rules-and-regulations/examination-offences>

Turnitin (<http://www.turnitinuk.com/>) is an Internet-based 'originality checking tool' which allows documents to be compared with content on the Internet, in journals and in an archive of previously submitted works.  It can help to detect unintentional or deliberate plagiarism.

It is a formative tool that makes it easy for students to review their citations and referencing as an aid to learning good academic practice. Turnitin produces an ‘originality report’ to help guide you.

**Referencing**

The University of Plymouth Library has produced an online support referencing guide which is available here: <http://plymouth.libguides.com/referencing>.

Another recommended referencing resource is [Cite Them Right Online](http://www.citethemrightonline.com.plymouth.idm.oclc.org/); this is an online resource which provides you with specific guidance about how to reference lots of different types of materials.

**Responsible Use of Artificial Intelligence (AI) in Assessments**

**Faculty of Science and Engineering Guidelines for 2024-25 academic year**

While technological advances such as AI (including ChatGPT) can be useful in supporting academic work, e.g. by aiding brainstorming, students are expected to use these responsibly and within the boundaries of academic integrity.

In general, AI tools such as ChatGPT should not be used in generating the final version of your work for submission. Specific instructions or expectations relating to use of AI will be clearly stated in the assessment briefing. If you are in any doubt, you should seek clarification from the member of staff who is responsible for setting that piece of assessed work.

**What can AI be useful for?**

* AI tools can be valuable for helping set out the parameters of arguments and providing examples of how to structure different pieces of work; AI can also be used to generate example code and also explore how other people's code works;
* AI can be used for proof-reading and checking for typos;
* In some instances, AI can be used to brainstorm ideas and provide inspiration about how to express points.

**What are the limitations of AI?**

* AI tools cannot provide you with the specific evidence needed to answer questions and demonstrate knowledge;
* This lack of evidence means that the statements/conclusions AI provides may be (at best) not relevant and (at worst) entirely incorrect for the piece of assessment you are completing.

**What does this mean for me?**

* With the above in mind, AI can be useful in brainstorming ideas, approaches, and structures to your work. Alongside your academic reading and research, you can leverage AI resources in the planning phases of your work;
* However, you are expected to generate your own assessed work for final submission (whether the main body of the work being submitted is in a written, graphical or numerical format);
* Often you will be expected to provide critical analysis linking your answer to appropriately referenced academic literature;
* Your submitted work must NOT have been generated using AI tools only, unless this is explicitly asked for in the assessment briefing.

**CONSEQUENCES OF MISUSE:**

Utilizing ChatGPT or similar AI tools to generate the assessed work that you submit is considered plagiarism and a breach of our university's academic offences regulations. Such practices can result in disciplinary action, up to and including a requirement to withdraw from the university. You can find the current version of academic regulations and related guidance here: https://www.plymouth.ac.uk/student-life/your-studies/essential-information/regulations