OPEN UNIVERSITY OF MAURITIUS

Undergraduate Programme Specification

BSc (Hons) Computer Science

Academic Year: 2023-2024

Programme documents detail the aims, learning strategies, structure and intended learning outcomes that students should achieve if they fully engage with the content of the programme. The document is intended to support and inform prospective students, current students, academic and support staff, external stakeholders (such as PSRBs) and external examiners.

1. PROGRAMME INFORMATION	
Title of Final Award	Bachelor of Science with Honours in Computer Science
	BSc (Hons) Computer Science
Code	OUbs033
Awarding Body	Open University of Mauritius
Department/Faculty	Computer Science and Information Technology
Programme Manager	Ms Rubeena Doomun
Administrative Contact Point	Prospective learners: admission1@open.ac.mu
	Existing learners: studentsupport@open.ac.mu
Programme Duration	*Minimum 3 years*
	Maximum 6 years
Total Credits	180
Credits Per Year	*Normally 60 credits per academic year*
	Number of credits per semester: 30
MQA NQF Level	Level 8
EHEA Level	Level 6
External Accreditors	Not applicable
Collaborative Partners	Not applicable
Programme Approval Date	11.06.2020
Last Revision	Not applicable
Last Update	April 2023

2. ENTRY REQUIREMENTS	
General:	Based on the General Entry Requirements under Direct Entry to Undergraduate Programmes, applicants should fulfil the following conditions: OPTION 1 A pass in English Language at Cambridge School Certificate/ 'O' Level or equivalent AND EITHER Pass in: 3 subjects at A-level and 1 subject at subsidiary level at Higher School Certificate Examination; OR Pass in: 2 subjects at A-level and 2 subjects at subsidiary level at the Higher School Certificate Examination; OR Pass in: 3 subjects at A-level at the London General Certificate Examination. OR any other qualifications acceptable to OU. (refer to OU general rules and regulations) OPTION 2 Submission of a comprehensive portfolio for possible recognition of prior learning/experience (RPL/RPE) as an alternative to above along with evidence for the language/numeracy/Information and Communication Technology (ICT) skills required for the programme of study. Note: • Mature candidates will be considered on their own merit. (refer to OU general rules and regulations) Learners who do not qualify under Option 1 may initially register for Foundation Courses offered by OU. (refer to OU general rules and regulations)
Programme Specific:	Subjects at A-Level should include (i) Mathematics, (ii)Computer or Science subject

3. PROGRAMME OVERVIEW

Aims and Objective of the Programme:	The programme aims to provide you with a thorough and systematic understanding of the field of Computer Science. The programme is designed to give you experience of core technologies and techniques, while making it possible for you to design and build software programs and systems. The applied dissertation project will enable you to acquire valuable skills in teamwork, project planning, time management and presentation, applying your learning to design and implementation of your project. The programme consists of a combination of skills that enable our graduates to keep pace with this fast moving subject, and achieve rewarding careers around the world. Graduates mainly go on to work in the ICT industry as software developers, system analysts, software engineers or consultants among others. Academic possibilities include further study towards a Master's degree programme or MPhil/PhD qualification.
Intended Learning Outcomes: After successfully completing this programme, students will be able to:	
Knowledge and Understanding	**K1**. Demonstrate knowledge and understanding of essential facts, concepts, principles and theories related to Computer Science. **K2.** Use specialist tools and state-of-the-art techniques to build computational systems. **K3.** Recognise and analyse specifications appropriate to specific problems and plan strategies for their solutions. **K4.** Demonstrate knowledge and understanding of methods of software design, development, project management and testing. **K5.** Relate to methods of research and enquiry within the discipline.
Cognitive Skills	**C1**. Apply appropriate knowledge, theory, tools, methods and techniques to plan, specify, design, model, implement, test, and document computer-based solutions. **C2**. Critically evaluate the impact of current and emerging methods and technologies. **C3**. Recognise the professional, moral and ethical issues involved in the exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices. **C4.** Recognise any risks or safety aspects that may be involved in the operation of computing equipment within a given context. **C5.** Find, read, understand and critically review literature related to Computer Science, including scientific publications, industrial documentation, standards, ethical, legal and environmental guidance. **C6.** Solve problems of a non-routine nature in creative and innovative ways.
Practical/ Professional Skills	**P1.** Design and construct reliable, secure and usable computer-based systems. **P2.** Deploy effectively the tools used for the construction of computer applications. **P3**. Retrieve information effectively, using, for example, browsers, search engines and catalogues.

	P4. Formulate an applied project involving a specialised software application, system, or other computer-based solution, using appropriate state-of-the-art techniques, technologies and tools. **P5**. Operate computing and other IT equipment safely and effectively, taking into account its logical and physical properties.
Transferable Skills	**T1**. Manage their learning and development including time management and organisational skills. **T2**. Work as a member of a team, recognising the different roles within a team, different ways of organising teams, and the requirements and responsibilities of leadership. **T3**. Develop interpersonal communication skills as part of their project experience. **T4**. Work independently on projects. **T5**. Make effective presentations to a wide range of audiences about technical problems and their solutions.

4. PROFESSIONAL, STATUTORY AND REGULATORY BODIES (where applicable)
Not applicable

5. LEARNING AND TEACHING STRATEGY

Learning and Teaching Methods:

Students will be provided with opportunities to engage in a diverse range of learning environments so as to maximise their learning. For this programme, students will interact with their tutor and their fellow students mostly through the e-platform.

The e-platform will use the following tools:

- Online Activities: for every unit covered in each module, students will be given opportunities to complete interactive learning activities including discussion forums, quizzes, field trips, webinars and problem-solving activities. Students will be encouraged to work independently but also to engage in collaborative work.

- Independent Study: Independent study forms an essential part in the development of your knowledge and understanding. We will guide you, via the e-platform, on the reading and reflection of primary and secondary texts. Students should use this independent study time to link knowledge with e-class and face-to-face activities and develop their own understanding and critical perspective on the topics they are studying.

We also offer optional face-to-face sessions.

The face-to-face sessions are an opportunity to untangle complex concepts and provide students with an opportunity to apply the knowledge acquired in the preceding weeks. During the face-to-face sessions, students can be expected to:
- Engage in problem solving activities
- Engage with reading material to engage in class discussions
- Review core/complex concepts through applied work.

Research Supervision:

In the final part, students will undertake an applied dissertation project in Computer Science, supervised by one of our tutors with expertise in the area of the dissertation topic. Students will have the opportunity to meet with the supervisor to explore the topic, receive guidance on the research and receive feedback on the work as it progresses.

Overall Workload:

Your overall workload as a student consists of independent learning, e-learning activities and, if you choose to, face-to-face sessions. The following gives you an indication of how much time you will need to spend on the different components of your programme at each level. Each ECTS credit taken is equivalent to 25 hours of study time.

The expected study time for this programme will be as follows:

Year 1: 1,500 hours for 60 ECTS credits.
Year 2: 1,500 hours for 60 ECTS credits.
Year 3: 1,500 hours for 60 ECTS credits.

Typically, for each year of your degree you will spend 0-10% of your time in face-to-face sessions, 30-40% of your time engaging with e-learning activities and 60% of your time in independent study time.

A typical study week for a student will involve some optional face-to-face sessions, required engagement in online discussion forum, the completion of online activities and independent study time to review attached readings, textbooks and relevant sections of the module document. Students should expect to devote 8 to 12 hours of study time per week per module.

These are indicative and may vary from student to student.

6. ASSESSMENT STRATEGY

Assessment Methods
A range of formative and summative assessment exercises are designed to enable you to demonstrate and apply your knowledge and understanding.

Most modules will consist of a Tutor Marked Assessment (TMA) component and a written examination. TMAs include:

- Technical reports;
- Software designs and implementation;
- Programming exercises and problem sets;
- Group work exercises, presentations and reports;
- Oral presentations;
- Applied dissertation project; and
- Viva.

Assessment Mapping: See Appendix Pg 14

Academic Feedback

Throughout the course of your studies, tutors will provide informal feedback on your online activities and class contributions. Feedback may be individual or provided to the class as a whole.

Each summative assessment will be accompanied by detailed marking criteria and marking scheme detailing the expectation of the assessment at each grade classification level. Feedback on assessment will be provided along the marking criteria. Marking criteria will be made available to the student at the same time as the assessment details.

Students will receive written individual feedback on all TMA components.

The university policy on assessment feedback and guidance on provisional marks can be found in the General Rules.

Late Submission, Extension and Re-sit Policy

The university policy on Late Submission, Extension and Re-sits can be found in the General Rules.

Special Circumstances

The university policy on Special Circumstance can be found in the General Rules.

Continuous Assessment and Exam Regulations

The university regulations on Continuous Assessment and Examination can be found in the General Rules.

7. ACADEMIC MISCONDUCT

As a safeguard to the quality and standard of Open University's qualifications and awards, the university takes any incidence of academic misconduct seriously and will investigate any reported case.

Academic Misconduct refers to any activity where a student, through unpermitted means, seeks to gain an advantage in the completion of an assessment. Any unpermitted action will be considered as academic misconduct when occurring during a formal examination, a TMA, or any other form of assessment considered by the Board of Examiners and undertaken in pursuit of a university qualification or award.

Plagiarism (using, intentionally or unintentionally, another person's work and presenting it as one's own) will be systematically checked through an automated text-matching detection software that supports the detection of plagiarism.

Any suspected cases of academic misconduct will be reported and investigated. Academic misconduct offences may lead to suspension or expulsion from the university.

The university regulations on Academic Misconduct can be found in the General Rules.

8. PROGRAMME STRUCTURE

C= Core (i.e. modules which must be taken to be eligible for the award)
E = Electives (i.e. modules chosen by students from a range of listed optional modules)
S1 = Semester 1
S2 = Semester 2

Year 1 – Level 5 (NQ-MQA) – Short Cycle Introductory (QF-EHEA)
All core modules must be taken.

Code	Module Title	Type	Semester	Credits
OUbs033111	Computer Architecture	C	S1	7.5
OUbs033112	Computational Mathematics	C	S1	7.5
OUbs033113	Principles of Programming 1	C	S1	7.5
OUbs033114	Cyber Laws & Ethics	C	S1	7.5
OUbs033121	Client Side Web Technologies	C	S2	7.5
OUbs033122	Network Principles	C	S2	7.5
OUbs033123	Database Principles	C	S2	7.5
OUbs033124	Principles of Programming 2	C	S2	7.5
			Credits Total	**60**

Year 2 – Level 6 (NQ-MQA) – Short Cycle Intermediate (QF-EHEA)
All core modules must be taken.

Code	Module Title	Type	Semester	Credits
OUbs033211	Server Side Web Technologies	C	S1	7.5
OUbs033212	Networking Technologies	C	S1	7.5
OUbs033213	OO Programming	C	S1	7.5
OUbs033214	Software Engineering	C	S1	7.5
OUbs033215	Academic Literacies and Communication Skills	C	S1	-
OUbs033221	Algorithms, Data Structures and Complexities	C	S2	7.5
OUbs033222	Mobile Technologies	C	S2	7.5
OUbs033223	Information Systems and Security	C	S2	7.5
OUbs033224	Project Management	C	S2	7.5
			Credits Total	**60**

*'Academic Literacies and Communication Skills' is a non-credit-bearing module that needs to be passed to proceed to level 8 and to be eligible for the award of the degree.

Year 3 – Level 7/8 (NQ-MQA) – 1st Cycle Honours (QF-EHEA)				
All core modules must be taken.				
Code	Module Title	Type	Semester	Credits
OUbs033311	Design Methodologies	C	S1	7.5
OUbs033312	Quality Assurance	C	S1	7.5
OUbs033313	Business Informatics	C	S1	5
OUbs033314	Cyber Security & Digital Forensics	C	S1	5
OUbs033315	Final Year Applied Project Analysis and Design	C	S1	5
OUbs033321	Final Year Applied Project Implementation	C	S2	15
OUbs033322	Fundamentals of AI and Machine Learning	C	S2	5
Students may choose 10 credits from the following:				
OUbs033323	Blockchain Technologies	E	S2	5
OUbs033324	Business Intelligence & Data Analytics	E	S2	5
OUbs033325	Multimedia	E	S2	5
			Credits Total	**60**

Overall Programme Credits Total	**180**

9. GRADING

Grading System:

Assessments are graded in percentage and correspond to a letter grade and a grade point.

Marks (x) %	Description	Letter Grade	Grade Point
X ≥ 70	Excellent	A	5

60 ≤ X < 70	Very Good	B	4
50 ≤ X < 60	Good	C	3
40 ≤ X < 50	Satisfactory	D	2
X < 40	Ungraded	U	0
Non-graded/pending	See section 17.1.1 in assessment rules and regulation for pending grades letter codes		

To pass a module, students need an overall of 40% weighted average of their combined continuous assessment and examination. All components of TMAs will have to be submitted and examination sat to pass the module.

Students will normally not be allowed to postpone more than two modules for the following semester.

If a student obtains grade "U" in three or more modules in the same semester, and the CPA is below 40 for that semester, the student will be requested to repeat the semester unless decided otherwise by the Academic Council upon the recommendation of the Board of Examiners. When repeating a semester, a student may or may not take the modules for which Grade C or above has been obtained.

If after completing a level the student's CPA < 40, the student will have to repeat the entire academic year and retake the modules as and when offered. However, s/he will not be required, if s/he wishes, to retake 3 module(s) for which Grade C or above has been obtained.

Students will not be allowed to repeat more than two semesters during the entire duration of the programme.

University general marking criteria for undergraduate exams and undergraduate dissertations can be found in the General Rules.

Cumulative Point Average (CPA):
Total CPA for undergraduate degrees is calculated by:
   a) multiplying the module credit by the % marks for the module and then summed up and divided by the total credits attempted over the cumulative period at each level (1 semester or 1 year); AND

   b) Taking the weighted average of the obtained CPAs at each level. The respective weights being set as follows: the CPA of level 5 modules (year 1) will be weighted at 15% (0.15); the CPA of level 6 modules (year 2) will be weighted at 35% (0.35); and the CPA of level 7/8 modules (year 3 and/or 4) will be weighted at 50% (0.5).

Example calculation of the CPA at level 5 for undergraduate programmes:

Course Level 5	% Scores	ECTS Credit unit	Module Credit x % Score
BAXX1	64	7.5	64*7.5 = 480
BAXX2	71	7.5	71*7.5 = 533

BAXX3	44	7.5	44*7.5= 330
BAXX4	59	7.5	59* 7.5= 443
BAXX5	82	5.0	82*5 = 410
BAXX6	62	5.0	62*5 = 310
BAXX7	65	5.0	65*5 = 325
BAXX8	54	15.0	54*15 = 810
Total		60	3640
CPA = 3640/60			**61.7**

Example Calculation Total CPA:

Level	Score	Weighted score
CPA level 5 (60 credits)	61.7	61.7 ***0.15** = 9.11
CPA level 6 (60 credits)	63.4	63.4***0.35** = 22.19
CPA level 7/8 (60 credits)	65.5	65.5***0.5** = 32.75
Total CPA (180 credits)		**64**

10. PROGRESSION, EXIT POINTS AND AWARD	
Progression	If a student fails to achieve 60 credits at the end of a year level, the Board of examiners will make a decision with regard to the student's progression. At its discretion, the Board of Examiners may: - allow a student to carry forward up to 15 credits in the following year level in order to retake these units in attendance; - require the student to repeat the year; - award of an exit award once the student has exhausted all the opportunities to retrieve failed assessment.
Classification of Awards	For the award of the Honours degree, all modules of the programme must be completed. The Certificate of Higher Education and the Diploma of Higher Education are awarded as possible exit points in the programme as indicated in the table below:

Award	Title	Level NQ-MQA	Total required Credits	Classification
BSc (Hons)	Computer Science	8	180	**1st Class Honours** (First): CPA ≥70

					2nd Class 1st Division Honours (2:1): 60 ≤ CPA ≤ 69 **2nd Class 2nd Division Honours** (2:2): 50 ≤ CPA ≤ 59 3rd Class Honours: 45 ≤ CPA < 50
	BSc	Computer Science	7	180	**Pass:** 40 ≤ CPA ≤ 44
	Diploma of Higher Education (DipHE)	Computer Science	6-7	120	**Distinction:** CPA ≥ 70 **Pass:** 40 ≤ CPA ≤ 69 **No Award:** CPA < 40
	Certificate of Higher Education (CertHe)	Computer Science	6	60	**Distinction:** CPA ≥ 70 **Pass:** 40 ≤ CPA ≤ 69 **No Award:** CPA < 40

11. STUDENT SUPPORT

Support available through:
studentsupport@open.ac.mu

12. Have Your Say

Open University values student feedback and students will be given opportunities to have their say on their learning experience in the following way:

- Student programme and module evaluation surveys;
- Acting as student representative and participating in a range of committees such as the staff-student consultative committee;
- Participating in programme validation processes.

The university will respond to student feedback through the following channels:

- Response and action taken following the module evaluation survey will be posted on the e-platform;
- Action from minutes will be monitored by the chair of the relevant committees;
- Annual programme monitoring process will take into account student feedback;

- Programme review process (every five years).

13. **Curriculum Map of Programme Learning Outcomes Against Module Intended Learning Outcomes**

Module Unit and Code				Knowledge and Understanding					Cognitive Skills						Practical Skills					Transferable Skills and Personal Attributes				
Module Title	Code	Type	Mode	K1	K2	K3	K4	K5	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	P5	T1	T2	T3	T4	T5
Year 1 QF-MQA Level 6																								
Computer Architecture	OUbs033111	C	BL	●				●		●	●	●	●				●		●	●			●	
Computational Mathematics	OUbs033112	C	BL	●										●			●			●			●	
Principles of Programming 1	OUbs033113	C	BL	●	●	●			●					●	●	●			●	●			●	●
Cyber Laws & Ethics	OUbs033114	C	BL	●				●		●	●		●				●			●			●	
Client Side Web Technologies	OUbs033121	C	BL	●	●	●	●	●	●					●	●	●				●	●	●		●
Network Principles	OUbs033122	C	BL	●	●	●			●			●		●	●				●	●	●		●	
Database Principles	OUbs033123	C	BL	●	●	●			●					●	●	●			●	●	●		●	
Principles of Programming 2	OUbs033124	C	BL	●	●	●	●		●					●	●	●			●	●			●	●
Year 2 QF-MQA Level 7																								
Server Side Web Technologies	OUbs033211	C	BL	●	●	●	●	●	●					●	●	●	●			●	●	●		●
Networking Technologies	OUbs033212	C	BL	●	●	●		●	●			●		●	●	●	●			●	●		●	
OO Programming	OUbs033213	C	BL	●	●	●	●		●					●	●	●	●			●	●		●	
Software Engineering	OUbs033214	C	BL	●	●		●		●	●	●		●	●	●	●				●			●	
Algorithms, Data Structures and Complexities	OUbs033221	C	BL	●					●					●	●	●			●	●			●	
Mobile Technologies	OUbs033222	C	BL	●	●	●	●		●			●		●	●	●	●			●	●	●	●	●
Information Systems and Security	OUbs033223	C	BL	●				●	●	●	●	●	●			●			●	●	●		●	

Module	Code	Type	Delivery	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Project Management	OUbs033224	C	BL	●				●	●	●	●		●			●			●		●	
Year 3 QF-MQA Level 8																						
Design Methodologies	OUbs033311	C	BL	●	●	●	●		●							●	●	●	●		●	
Quality Assurance	OUbs033312	C	BL	●			●		●	●	●	●	●			●	●	●	●	●	●	
Business Informatics	OUbs033313	C	BL	●	●			●		●	●	●	●					●	●		●	
Cyber Security & Digital Forensics	OUbs033314	C	BL	●				●		●	●	●	●					●	●	●	●	
Final Year Applied Dissertation Project	OUbs033315 OUbs033321	C	BL	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Fundamentals of AI and Machine Learning	OUbs033322	C	BL	●	●				●	●	●		●			●	●	●	●		●	
Blockchain Technologies	OUbs033323	E	BL	●	●				●	●	●	●	●			●	●	●			●	
Business Intelligence & Data Analytics	OUbs033324	E	BL	●	●				●		●	●	●				●	●	●	●	●	
Multimedia	OUbs033325	E	BL	●	●				●							●	●	●	●	●	●	●

C = Core; E = Elective; DL = Distance Learning; BL= Blended Learning; CD = Campus Delivery

Appendix 1: Assessment Mapping

Module Code	Module Title	Assessment Method
Year 1 QF-MQA Level 6		
OUbs033111	Computer Architecture	**TMA 40%:** Online Activities (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033112	Computational Mathematics	**TMA 40%:** Online Quiz (10% of TMA) Problem Solving Exercises (30% of TMA) **Final Examination 60%**
OUbs033113	Principles of Programming 1	**TMA 40%:** Online Quiz (10% of TMA) Programming Project plus Presentation (30% of TMA) **Final Examination 60%**
OUbs033114	Cyber Laws & Ethics	**TMA 40%:** Online Forum Participation (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033121	Client Side Web Technologies	**TMA 40%:** Online Quiz (10% of TMA) Group Project with Presentation includes Individual Component (30% of TMA) **Final Examination 60%**
OUbs033122	Network Principles	**TMA 40%:** Online Exercises (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**

OUbs033123	Database Principles	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033124	Principles of Programming 2	**TMA 40%:** Online Quiz (10% of TMA) Programming Project plus Presentation (30% of TMA) **Final Examination 60%**
Year 2 QF-MQA Level 7		
OUbs033211	Server Side Web Technologies	**TMA 40%:** Online Quiz (10% of TMA) Group Project with Presentation includes Individual Component (30% of TMA) **Final Examination 60%**
OUbs033212	Networking Technologies	**TMA 40%:** Online Exercises (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033213	OO Programming	**TMA 40%:** Online Exercises (10% of TMA) Case Study Report (30% of TMA) **Final Examination 60%**
OUbs033214	Software Engineering	**TMA 40%:** Online Exercises (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033215	Academic Literacies and Communication Skills	**TMA 100%:** Online Activities (10% of TMA) Project plus Presentation (90% of TMA)

OUbs033221	Algorithms, Data Structures and Complexities	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033222	Mobile Technologies	**TMA 40%:** Online Quiz (10% of TMA) Research Project with Presentation (30% of TMA) **Final Examination 60%**
OUbs033223	Information Systems and Security	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033224	Project Management	**TMA 40%:** Online Forum Participation (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
Year 3 QF-MQA Level 8		
OUbs033311	Design Methodologies	**TMA 40%:** Online Exercises (10% of TMA) Research Report (30% of TMA) **Final Examination 60%**
OUbs033312	Quality Assurance	**TMA 40%:** Online Exercises (10% of TMA) Research Report (30% of TMA) **Final Examination 60%**
OUbs033313	Business Informatics	**TMA 40%:** Online Forum Participation (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**

OUbs033314	Cyber Security & Digital Forensics	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033315	Final Year Applied Project Analysis and Design	Written Report- 100%
OUbs033321	Final Year Applied Project Implementation	Project Software together with a Written Report Followed by Viva- 100%
OUbs033322	Fundamentals of AI and Machine Learning	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033323	Blockchain Technologies	**TMA 40%:** Online Quiz (10% of TMA) Technical Report (30% of TMA) **Final Examination 60%**
OUbs033324	Business Intelligence & Data Analytics	**TMA 40%:** Online Quiz (10% of TMA) Analytical Report (30% of TMA) **Final Examination 60%**
OUbs033325	Multimedia	**TMA 40%:** Online Quiz (10% of TMA) Design Project plus Presentation (30% of TMA) **Final Examination 60%**