

### **Course Information Form**

This Course Information Form provides the definitive record of the designated course

#### **General Course Information**

Course Title	Architectural Engineering
Qualification	BEng (Hons)
FHEQ Level	6
Intermediate Qualification(s)	
Awarding Institution	University of Bedfordshire
Location of Delivery	OW (STIMU) (Yangon and Mandalay campuses)
Mode(s) of Study and Duration	FT 12 months
Professional, Statutory or Regulatory Body (PSRB) accreditation or endorsement	Joint Board of Moderators and Institution of Civil Engineers
UCAS Course Code	
External Benchmarking	UKSPEC (Engineering Council, https://www.engc.org.uk/ukspec.aspx), FHEQ Level Descriptors - Level 6 (2014), QAA Subject Benchmark for Engineering (2019), QAA Subject Benchmark for Land, Construction, Real Estate and Surveying (2019) and QAA Subject Benchmarks for Architecture (2020)
Entry Month(s)	October, February and June

#### Why study this course

Architectural engineers apply engineering principles to the construction, planning, and design of buildings and their structures. They often work with other engineers and with architects to focus on the function, layout, and aesthetics of building projects. They are needed to ensure that building projects are properly planned, costed, and meet the needs of the project, while taking into account engineering and architectural principles. In developing countries, a large pool of high quality, accredited architectural engineering graduates are needed as demand for engineers is significantly increasing due to the investment and development opportunities emerging in these nations.

This architectural Engineering degree prepares students through engagement with the principles and practise used in structures and designs, and opportunities to innovate and be creative within these contexts. There is a focus on environmental design through the study of lightings and acoustics within a building, structure or complex. This architectural engineering supports students to become conceptual thinkers who will be well prepared to be qualified professionals to produce integrated and sustainable designs by working together with architects,

artists and other professionals within a multidisciplinary engineering environment. Students are also required to undertake a self-selected project, to develop their skills to work autonomously at a high level.

#### **Educational Aims**

In addition to the broad aims of the course, the specific qualities built into the curriculum ensure that Architectural Engineering students will gain a systemic understanding of new development and application, and the capacity to analyse, assess and recommend high level strategies for materials, structures and methods. The specific objectives of this course, therefore, are to provide students with the skills and knowledge of key subject areas that relate to sustainability at operational, tactical and strategic levels for modern building technologies.

#### **Course Structure**

Unit Code	Level	Credits	Unit Name	Core or option
STI025-3	6	30	Architectural Engineering Project	Core
STI014-3	6	15	Architectural Planning	Core
NEWSTI002- 3	6	15	Environmental Science and Building Services	Core
NEWSTI022- 3	6	15	Digital Analysis in Structural Design	Core
STI012-3	6	15	Architectural Design and Practice	Core
NEWSTI018- 3	6	15	Emerging Technology and Sustainability	Core
NEWSTI001- 3	6	15	Engineering Design Project	Core

The Units which make up the course (including the Professional Practice Year as applicable) are:

#### **Course-Specific Regulations**

Students are not permitted any level of condonement or compensation at Level 6.

#### **Entry requirements**

Completion of the Diploma in Engineering (Architectural) Level 4 and Advanced Diploma in Engineering (Architectural) Level 5 (equivalent to HND) of the STIMU programme will allow entry onto the Level 6 award.

#### **Additional Course Costs**

- 1. Transportation charges to/from the site
- 2. Personal Protective Equipment (PPE)
- 3. Theodolite rental
- 4. Stationary, printing and book binding
- 5. Camping facilities

#### **Graduate Impact Statements**

The course has been designed to develop graduates who are able to:

- apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects within architectural engineering
- critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem in the area of architectural engineering
- communicate information, ideas, problems and solutions to both specialist and non-specialist audiences in relation to architectural engineering concepts.

#### **Course Learning Outcomes**

- 1. demonstrate a systematic understanding of key aspects of architectural engineering, including acquisition of coherent and detailed knowledge, at least some of which is at, or informed by, the forefront of defined aspects of a discipline
- 2. demonstrate an ability to deploy accurately established techniques of analysis and enquiry within an architectural engineering context
- 3. conceptualise understanding that enables the student to engage with current architectural engineering practice based on contemporary research, and use it to engage in solutions for contemporary problems in the area.
- 4. demonstrate an appreciation of the uncertainty, ambiguity and limits of knowledge
- 5. demonstrate the ability to manage and communicate their own learning, through the use of developmental portfolios, which are underpinned by engagement with contemporary research in the discipline of architectural engineering.
- 6. apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out architectural engineering projects
- 7. critically evaluate arguments, assumptions, abstract concepts and data applicable to architectural engineering projects, to make judgements, to achieve a range of solutions, and demonstrate the ability to choose the most economical solution.

#### **PSRB** details

The Joint Board of Moderators and the Institution of Civil Engineering (ICE)

#### Learning and Teaching

The learning and teaching strategy is made up of the explanation of theoretical concepts accompanied by tutor supported practical activity to reinforce understanding. This is accomplished by a combination of lectures, tutorials, moderated discussions/debates and peer group support, directed practical activities with dedicated online technical support and reading materials. This shall often be in a combined lecture, discussion, practical and research in one session with academic and demonstrator support, including through online learning and alternate teaching modes.

Additionally, there is self-directed research which can be assisted by the use of teaching packs, online technical indexes, and Internet and government publications. The particular form of support is unit specific; however, all are characterised by tutor support and pragmatic approach to activity. All the teaching sources are available in the VLE. These include references and links, general unit and course information, discussion groups, tests and assessments.

Therefore the approach to teaching and learning begins with student centred methods and progresses towards independent learning. As the teaching is centred upon students, the department aims to build their confidence by providing timely and informative feedback under the guidance of their lecturer/tutor.

Project supervision involves regular tutorial contact between groups/individuals and their supervisor. The project is seen as a guarantee of the Honours nature of students and is seen, both within the University and outside as an indication of the overall abilities and performance of the student.

#### Assessment

This course will be assessed using a range of assessment techniques. The two main approaches will be exams and portfolios. On this course, it is recognised that a number of units focus on knowledge, understanding, and technical skills that is required to be captured through traditional invigilated exams.

However, in order to capture much more practically oriented units, a developmental portfolio will be key. These portfolios should capture progressive development of students and should be subject to summative and formative assessment as their work develops.

These types of product are key in this industry, as they play an important role in presenting professional practice in application for membership of professional institutions.

The final project, which is a year-long unit, is key in demonstrating the characteristics expected of students at level 6, in relation to their ability to conduct substantial independent research to a high standard.

#### **Assessment Map**

Unit Code	C/ O	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Unit Code	C/ O	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STI025- 3	С												W R- I												PJ - DI S					P
STI014- 3	С							C W - P O							E X															
NEWST 1002-3	С																												CW-PO	E X
STI022- 3	С														CW-PO															
STI012- 3	С																											C W - P O		E X

NEWST I018-3	с													W R- I	P R- O R	
NEWST I001-3	с														C W - P O	

#### Developing your employability

This course is taught by experienced professionals with focus on pragmatism and the industry requirements. Guest lecturers are also invited to share their current experience with students. All students are required to register as student members of the Institute of Civil Engineers, and to access the resources and online events provided through membership. Students are also encouraged strongly to attend events organised by the Myanmar Engineering Council and Myanmar Engineering Society. By presenting your research and analysis you will also develop your presentation and communication skills, deemed to be essential by the industry. Following this course, you will be in a good position to apply for membership of a range of professional bodies, such as the Institution of Civil Engineering or the Institute of Highway Engineers, of Myanmar Engineering Society.

#### After Graduation

On completing this course students are likely to progress to work as a;

- Architectural Engineer
- Project Manager
- Site Engineer
- Facilities Manager
- Highways Engineer
- Infrastructure Engineer

This qualification can also serve as a starting point for further postgraduate study and research in the area of engineering.

#### **Additional Information**

#### **Initial Assessment**

An initial piece of summative assessment will be provided in the first 6 weeks through the proposal assessment for the individual project.

#### Improving students' learning

Students are expected to participate in active discussions and engage in debate, examine information, analyse, discuss and arrive at recommendations based on justification.

#### **Academic Integrity**

The issue of academic integrity is critical for students in HE level. This course pays close attention to the issue of plagiarism across all units involving assessment tasks for which students prepare and write outside of class time and hand in electronically.

#### Sustainability

Sustainability is one of the four Joint Board of Moderators Core Threads. The engineer's approach to sustainability and/or sustainable development in included in many units, and assessed through student outputs.

#### Student Support during the course

Information for Students

Grading and assessment methods and requirements are presented during application and at the induction day. This is to ensure that students' expectations and performance are aligned with the university assessment criteria and standards and those students are well guided in achieving their individual academic goals and in assessing their own learning.

You will be given a detailed course handbook containing the regulations and support services, textbooks, reference list, structure of the program, assessment structure, course overview, orientation of learning management system, time-table and the list of faculty members. Details of the Course Co-ordinator and unit Co-ordinator list will be disseminated to you during induction and you are encouraged to seek support from your assigned coordinator when appropriate.

Request of a special meeting with the Course Co-ordinator or Unit Co-ordinator is also available upon appointment for the specific unit related discussion, consultation and etc. Information on course/programme content, and requirements are contained in the syllabus and/or disseminated to you by each concerned faculty at the beginning of the course or during the orientation.

These are also contained in the STI's in-house and customized Learning Management System (LMS) that you can access anytime. Information on grades or matters related to them is provided by concerned faculties on an individual basis.

Request of transcript or certificates of grades can be requested from the Records Office upon approval by the Academic Department as well as the Registrar's Office. Grade matters are confidential and held in high privacy by staff concerned. Learning Resources You will be given a range of services including library service, access to the computer lab with preloaded list of software, printing facility, high speed Wi-Fi internet connectivity and other necessary support. At the point of, application you will be given information on the requirement for English language skills. You may need to do an English placement test, at the discretion of the Course Coordinator.

#### **Tutoring and Mentoring**

The STIMU provides students with access to student-mentor relationships early in the commencement of your program. Upon the start of school, you will be assigned advisers and introduced to other faculties handling other academic support assistance such as in research, job placement, and exams. STIMU also extends collaborative mentoring possibilities to you in all aspects covering academic, professional, social and personal needs. Respective teachers are assigned to provide specific mentoring and advice on career prospects such as: CV preparation and job interview preparations. On academic matters, one on one advisories are given to help you in exam review, class report presentations, research projects, IT support (use of computers to search for information, power point presentations, word processing), and other study skills such as interpreting learning materials. Participation in Academic and Administrative Review.

Through surveys and the Staff-Student Liaison Committee for Architectural Engineering, you will be given the opportunity to take part in the review of the course, assessments, exams, trainers and staff.

You can also participate in assessment of classroom activities, peer projects and presentations, as well as giving feedback on the University's outside activities, such as, field trips and seminars. Feedback is conducted both formally using university feedback forms, and informally through classroom discussions, commentaries and recommendations lecture. STI collects feedback through the university feedback forms on Exam Assessment, Trainers'

Assessment, Staff Assessment and Course Assessment. The qualitative and quantitative data are collected, synthesized and reported in the regular general trainers' meeting and Faculty meeting together with the SQA Unit. The result of the feedback is collaboratively reviewed during the meetings and subsequent reports are prepared for the Management and the Academic Board for action and for inclusion in the strategic planning by the SQA unit which is the university's central mechanism in coordinating and monitoring review contents and preparing unbiased and holistic reporting.

To ensure that students know that their voices are heard and that outcomes of feedback are addressed in a timely fashion, information regarding results and actions related to the assessment are communicated to the students and other stakeholders including faculty members, staff and senior management. Vehicles to disseminate information are through classroom "teacher announcement" where teachers are given a chance to inform the students, entertain questions and give advisory when necessary; Bulletin Board, Facebook, the Newsletter, through a meeting with the Student Council, the Staff-Student Liaison Commitee for Architectural Engineering and during the regular teacher-student-parents forum.

#### Student Peer Feedback Mechanisms

STIMU maintains an environment of free discussions in class and around campus among students. Student lounges and discussions rooms are provided that would give you a way to extend support and help to each other. The Student Council also has become a means to which students gather together on issues or concerns that impact on your studies and performance.

#### Instant Feedback Mechanism

Another useful and helpful feedback form used by the University is the instant feedback facility. You are able to relay messages to key members of staff. This facility enables the School to respond quickly to teaching related problems that cannot wait until the feedback forms are handed in at the end of the course.

One way is accomplished through communication open to all students. Instructors respond to students needs during their regular consultation hours. The Department support staffs are also available during office hours to receive any concerns and needs from you. Another form of instant feedback system popular to students is through the school's Facebook. Within the site, however, the privacy of information is not assured because of the nature of the social media. However, this form supplements the process of feedback.

**Responding to and Use of Student Feedback** It is the responsibility of the Faculties and other Departments to obtain systematic and regular information on the effectiveness of teaching and learning and to respond appropriately in a timely manner.

The review arrangements are normally scheduled right after the feedback is gathered, usually after each term or programme, and are not left until the end of the following year. The prescribed format and frequency of review is left to the decision of the review teams. Review teams are done at two levels, one at the local level or at the faculty / department level and second is at the SQA Committee level.

The Academic Board sets the frequency and format of review at the SQA level. The yearly strategic planning arrangements make use of the SQA final report. Feedback results are kept in electronic copies and together with the raw survey data and other written analysis of students and review teams are kept in the Academic Department and are open for review and use by the SQA Committee and the General Board, as well as to students subject to normal conventions of confidentiality.

To inform students of the outcome of their feedback and make them know that their voices are heard, STI ensures that feedback results are communicated to the students through their respective announcements from teachers during classroom sessions. A Bulletin Notice space is also provided for any information regarding results or actions as a result of the feedback.

Course	Equality	Impact	Assessment
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Question	Y/N	Anticipatory adjustments/actions
Is the promotion of the course open and inclusive in terms of language, images and location?	Y	
Are there any aspects of the curriculum that might present difficulties for disabled students? For example, skills and practical tests, use of equipment, use of e- learning, placements, field trips etc.	Y	Site visits would need to be altered to allow access and safe compltion of measuremnet activities.
Are there any elements of the content of the course that might have an adverse impact on any of the other groups with protected characteristics <sup>1</sup> ?	N	
If the admission process involves interviews, performances or portfolios how have you demonstrated fairness and avoid practices that could lead to unlawful discrimination?	NA	
Have you framed the course learning outcomes and Graduate Impact Statements in a non-discriminatory way?	Y	
Does the course handbook make appropriate reference to the support of disabled students?	Y	

Administrative Information – Faculty completion					
Faculty	Engineering				
Portfolio	Undergraduate				
Department/School	Engineering				
Course Coordinator	U Zaw Ko Ko				
Semester pattern of operation	Indicate which semesters the course operates over from this list: Oct (Semester 1), Feb (Semester 2), June (Semester 3)				
PSRB renewal date (where recognised)					
Version number	1/20				
Approved by (c.f. Quality Handbook ch.2)	University approval event				
Date of approval (dd/mm/yyyy)	29/05/2020				
Implementation start-date of this version (plus any identified end-	10/20				

<sup>&</sup>lt;sup>1</sup> Age, Gender reassignment, Marriage and civil partnership, Pregnancy and maternity, Race, Religion and belief, Sex, Sexual orientation

date)	
Study model type if not on-campus	Validated

	Name	Date
Form completed by	David Jazani	14/05/2020
Signature of Chair of Faculty TQSC to confirm the accuracy of information presented		

<b>Course Updates</b> – ensure that the revised CIF is given a new version number each time a change is made						
Date	Nature of Update	FTQSC Minute Ref:				

Administrative Information – Academic Registry completion					
Route code (post approval)	BEAENOWF				
JACS / HECoS code (KIS)	100148				
SLC code (post approval)					
Qualification aim (based on HESA coding framework)					



## Annexes to the Course Information Form

These annexes will be used as part of the approval and review process and **peer academics** are the target audience.

#### **General course information**

Course Title	Architectural Engineering
Qualification	BEng (Hons)
Route Code (SITS)	BEAENOWF
Faculty	Engineering
Department/School	Engineering
Version Number	1/20

Unit code	STI025-	STI014-	NEWSTI020-	NEWSTI022-	STI012-	STI018-	STINEW001-					
	3	3	3	3	3	3	3					
Level	6	6	6	6	6	6	6					
Credits	30	15	15	15	15	15	15					
Core or option	Core	Core	Core	Core	Core	Core	Core					
Course Learning Outcome	Insert LO1	and/or LC	02 for each unit i	into cell corresp	onding to th	e course lea	arning outcome					
(number)			1	1				 				
1	LO1,LO2	LO1, LO2		LO1,LO2	LO1,LO2	LO1,LO2	LO2					
2	LO1,LO2	LO1, LO2		LO1,LO2			LO2					
3	LO1,LO2			LO1,LO2	LO1,LO2	LO1,LO2						
4	LO1,LO2	LO1, LO2		LO1,LO2			LO1,LO2					
5	LO1,LO2	LO1, LO2			LO1,LO2	LO1,LO2						
6	LO1,LO2	LO1, LO2		LO1,LO2	LO1,LO2	LO1,LO2	LO1,LO2					
7	LO1,LO2	LO1, LO2		LO1,LO2	LO1,LO2	LO1,LO2	LO1,LO2					

# Annex A: Course mapping of unit learning outcomes to course learning outcomes

# Annex B: Named exit or target intermediate qualifications

This annex should be used when Schools wish to offer intermediate qualifications which sit under the main course qualification as named exit or target awards, rather than unnamed exit/default awards.

#### Section 1: General course information

Intermediate Qualification(s) and titles	Not applicable
Mode(s) of Study and Duration	
Type of Intermediate Qualification(s)	
Route Code(s) (SITS) of Intermediate Qualification(s)	

#### Section 2: Qualification unit diet

One table to be used for each intermediate qualification

Confirmation of unit diet for:	Insert intermediate qualification and title						
The units to achieve the credits required may be taken from any on the overall diet for the main course qualification							
A combination of units from a restricted list must be taken to achieve the credits required (specify the list below)							
A specific set of units must be taken to achieve the credits required (specify units below)							

List of units (if applicable):-

# Section 3: Course structure and learning outcomes

One table to be used for each intermediate qualification

Intermediate qualification and title				Not	applicab	le									
The Units which make up this course are:					Cont Inser the c	<b>ributin</b> t LO1 a ourse l	<b>g towa</b> and/or earning	ards th LO2 fo g outco	<b>e lear</b> i r each me	n <b>ing o</b> i <i>unit int</i>	u <b>tcom</b> o cell c	<b>əs</b> :orresp	onding	to	
Unit Code	Level	Credits	Unit Name		Core or option	1	2	3	4	5	6	7	8	9	10
													<b></b>	<u> </u>	
														<u> </u>	
													<u> </u>	┼───	<u> </u>

# Annex C: Course mapping to FHEQ level descriptor, subject benchmark(s) and professional body or other external reference points

One set of mapping tables to be produced for the course and each named intermediate qualification

Course (or intermediate)	BEng (Hons) Architectural Engineering
qualification and title	

FHEQ Descriptor for a		Со	urse	Lear	ning	Outo	ome	(s)	
higher education	Level 6 BEng (Hons)	1	2	3	4	5	6	7	
qualification	Architectural								
	Engineering	V	V	V			V	V	
a systematic understanding	of key aspects of their	Х	X	X			Х	Х	
field of study, including acq	uisition of coherent and								
detailed knowledge, at leas	t some of which is at, or								
Informed by, the forefront of	f defined aspects of a								
	- h		V				V		
an ability to deploy accurate	ely established		X				X		
techniques of analysis and	enquiry within a								
	hat anablas the	v		V					
conceptual understanding t		^		^					
student:- to devise and sus	tain arguments, and/or								
to solve problems, using lot	refront of a dissipline								
to describe and comment u	non porticular opporte								
of current research or equi	valent advanced								
scholarship in the discipline									
an appreciation of the upper	tainty ambiguity and				x			X	
an appreciation of the uncertainty, ambiguity and limits of knowledge					^			^	
the ability to manage their own learning, and to						x	x		
make use of scholarly revie	ws and primary						~		
sources (for example, refer	eed research articles								
and/or original materials an	propriate to the								
discipline).									
apply the methods and tech	niques that they have		Х	Х			Х		
learned to review. consolidation	ate. extend and apply								
their knowledge and unders	standing, and to initiate								
and carry out projects	<b>O</b> ,								
critically evaluate argument	s, assumptions,					Х	Х		
abstract concepts and data	(that may be								
incomplete), to make judge	ments, and to frame								
appropriate questions to ac	hieve a solution - or								
identify a range of solutions	- to a problem								
communicate information, i	deas, problems and				Х		Х		
solutions to both specialist	and non-specialist								
audiences.									
the qualities and transferab	le skills necessary for		Х			Х	Х		
employment requiring:- the	exercise of initiative								
and personal responsibility-	<ul> <li>decision-making in</li> </ul>								
complex and unpredictable	contexts- the learning								
ability needed to undertake	appropriate further								
training of a professional or	equivalent nature.								

Course Information Form (CIF) QAP0XXX

Subject Benchmark Statement(s)	Engineering (2019), Land, Construction, Real Estate and Surveying (2019) and Architecture (2020)	Evidence and/or Course Learning Outcome(s) How the course takes account of relevant subject benchmark statements
be pragmatic, taking a system logical and practical steps neo concepts to become reality	atic approach and the essary for often complex	CLOs 1,4 & 6 Units – ALL contribute to this overall expectation
seek to achieve sustainable so have strategies for being creat overcoming difficulties by emp knowledge and understanding	blutions to problems and tive, innovative and bloying their skills, in a flexible manner	CLO 7 Units – ALL contribute to this overall expectation
be skilled at solving problems numerical, computational, ana using appropriate tools	by applying their lytical and technical skills,	CLOs 2 & 6 Units – STI025-3, STI012-3, , NEWSTI022-3, and STINEW001-3
be risk, cost and value-consci ethical, social, cultural, environ and wider professional respon	ous, and aware of their nmental, health and safety, isibilities	CLOs 6 & 7 Units – ALL contribute to this overall expectation
be familiar with the nature of b the creation of economic and	ousiness and enterprise in social value	CLO 7 Units – ALL contribute to this overall expectation
appreciate the global dimension commerce and communication	ons of engineering, n	CLO 3 Units – STI025-3, STI012-3, NEWSTI022-3 and STI018-3
be able to formulate and opera codes of conduct, when faced	ate within appropriate with an ethical issue	CLOs 1 & 7 Units – ALL units contribute to this overall expectation
be professional in their outlool working, be effective commun exercise responsibility and so approaches.	<, be capable of team icators, and be able to und management	CLOs 1,5 & 6 Units – ALL units contribute to this overall expectation
demonstrate familiarity with a specific facts and principles in awareness of the current limits knowledge	wide range of subject- combination with an s of theory and applied	CLO 1 Units – ALL units contribute to this overall expectation
understand the provisional nat and associated information an alternative explanations within	ture of problem definition ad allow for competing and their subject	CLOs 2,3 & 6 Units – ALL units contribute to this overall expectation
exhibit understanding of the description of the des	efining elements of the and/or cross-curricula	CLOs 1,2 & 6 Units – ALL units contribute to this overall expectation
tackle problems by collecting, appropriate qualitative and qu using it creatively and imagina introduce and develop innoval and follow them through	analysing and evaluating antitative information, and atively to solve problems, ions, and make decisions	CLOs 2,3 & 6 Units – ALL units contribute to this overall expectation
plan and execute research or evaluate the outcomes, draw make recommendations	development work, valid conclusions and	CLOs 3 & 5 Units – STI025-3, STI012-3, and STI08-3
display skills in evaluating and manner, new information prov	l interpreting, in a balanced ided by others from a	CLOs 6 & 7 Units – ALL units contribute to this

range of fields of study	overall expectation
display generic scholarly and award-specific professional skills and demonstrate the ability to acquire new competencies required for career progression	CLO3 Units – ALL units contribute to this overall expectation
assess the ethical, equality and inclusion consequences of human activities to optimise community and environmental sustainability.	CLO7 Units – ALL units contribute to this overall expectation
critically analyse, synthesise and summarise information from a variety of sources	CLOs 1,3 & 7 Units – ALL units contribute to this overall expectation
recognise and use appropriate theories, methodologies, concepts and principles from a range of subjects	CLOs 1,2 & 6 Units – ALL units contribute to this overall expectation
collect, analyse and integrate several lines of evidence to develop balanced arguments demonstrating critical thinking and synthesis	CLOs 2 & 5 Units – ALL units contribute to this overall expectation
plan and design an experiment, investigation, survey or other means to test a hypothesis or proposition	CLOs 2,6 & 7 Units – ALL units contribute to this overall expectation
apply knowledge and understanding to address multidisciplinary problems within a local and global context	CLOs 1,2 & 6 Units – ALL units contribute to this overall expectation
demonstrate creativity and innovation	CLO7 Units – ALL units contribute to this overall expectation
demonstrate awareness of the provisional nature of the facts and principles associated with a field of study with those based on opinion and not supported by sound evidence	CLOs 1 & 4 Units – ALL units contribute to this overall expectation
plan, conduct and report on investigations, including those using secondary data	CLOs 5 & 7 Units – ALL units contribute to this overall expectation
collect, record and interpret diverse types of information generated by a wide range of methods and summarise it using appropriate qualitative and/or quantitative techniques	CLOs 3 & 7 Units – ALL units contribute to this overall expectation
devise, plan and undertake field, laboratory or other investigations in a responsible, sensitive and safe manner, paying due diligence to risk assessment, ethical and data protection issues, rights of access, and relevant health and safety issues	CLOs 3 & 6 Units – ALL units contribute to this overall expectation
take account of safety regulations, legal requirements, including those relating to equality and inclusion, and the impact of investigations on the environment	CLO1 Units – ALL units contribute to this overall expectation
appreciate and analyse financial and other management information and use it in decision-making	CLO7 Units – ALL units contribute to this overall expectation

acquire course-specific practical and professional competencies.	ALL CLOs
appreciate issues of sample selection, accuracy.	CLOs 3.6 & 7
precision and uncertainty during collection, recording	Units – ALL units contribute to this
and analysis of data in the field, in the laboratory or	overall expectation
colleted from accordery courses	•
collated from secondary sources	
solve numerical problems using first principles,	Unite ALL unite contribute to this
computer-based and other techniques.	overall expectation
use the internet in a context which recognises its	ALL CLOs
limitations as a means of communication and a source of	
information	
demonstrate competence in the use of electronic	Units – ALL units contribute to this
information handling and data processing and analysis	overall expectation
software and applications through the use of digital	
information systems for example BIM and GIS	
use a range of IT platforms (for example, desktop	Units – ALL units contribute to this
server tablet and mobile) and social media to	overall expectation
communicate information to a range of audiences	
offectively	
develop the skills necessary for self-managed lifelong	I Inits – ALL units contribute to this
learning and ongogement including for example	overall expectation
working independently, offective time menagement and	
Ability to graate grabitectural designs that actively both	Lipite:
Ability to create architectural designs that satisfy both	STI012-3 and STI014-3
Adequate knowledge of urban design, planning and the	Unite:
skills involved in the planning process	STI012-3 and STI014-3
Understanding of the relationship between people and	
buildings, and between buildings and their environment,	NEWSTI002-3 and STI018-3
and the need to relate buildings and the spaces between	
them to human needs and scale	
Understanding of the profession of architecture and the	Units:
role of the architect in society, in particular in preparing	STI025-3 and STI014-3
briefs that take account of social factors	
Understanding of the methods of investigation and	Units:
preparation of the brief for a design project	S11012-3 and S11014-3
Inderstanding of the structural design constructional	l Inits:
and engineering problems associated with building	STI012-3 and STI014-3
design	
Adequate knowledge of physical problems and	Units <sup>.</sup>
technologies and the function of buildings so as to	STI012-3 and STI014-3
provide them with internal conditions of comfort and	
protection against the climate	
The necessary design skills to meet building usors'	Units <sup>.</sup>
requirements within the constraints imposed by cost	STI012-3 and STI014-3
factors and building regulations	
Adequate knowledge of the industrias organisations	l Inits:
regulations and procedures involved in translating design	NEW002-3 and NEWSTI001-3
concepts into buildings and integrating plans into overall	
planning	

The format of the following mapping tables may be adjusted.

Qualification Characteristic	(insert title and year where appropriate)	<b>Evidence</b> How the course takes account of relevant qualification characteristics documents
Not applicable		

Professional body or other external reference points	<b>Evidence</b> How the course takes account of Professional body or other external reference points

## Annex D: Diet Template

Course Title:	BEng (Hons) Architectural Engineering					
Route Code:	BEAENOWF	Mode: e.g. Full Time	FULL-TIME			
Length of course:	12 MONTHS					

Please note a separate diet sheet is needed for each location of delivery (i.e. Luton, Bedford, partner location), each start date (i.e. October, February), each course length (i.e. 12 month, 15 month) & each attendance mode (i.e. Full Time).

#### Location of delivery (please tick):

Luton AA		
Bedford AB		
Milton Keynes AD		
Other (please state)	Х	STIMU (Myanmar)

#### Delivery pattern - please highlight all applicable start months, if other please state):

Semesterised	ОСТ	FEB	JU	Ν	Exception			
PG Block delivery (intake months ONLY)	BLK1 OCT	BLK NO'	2 V	BLK3 FEB		BLK4 APR	BLK5 JUN	BLK6 AUG
Yearlong delivery	OCT (TY)	FEB (FY)						
<u>Other (outside of agreed</u> patterns) <sup>2</sup>	The project element runs across both semesters, but all other units are semesterised							

A list of valid available period codes can be found on the intranet at

<u>https://in.beds.ac.uk/registry/student-records/srs-training-and-development/sits</u>. Please refer to this when completing the diet sheet below. If your diets differ year to year e.g. SET A, SET B, please indicate clearly the academic year and set applicable.

If your diet includes units which have not yet been assigned codes, please ensure this is clear by using NEW in the unit code column, followed by the correct prefix to be used e.g. ASS. Student Records will then assign a new unit code. Please note that a change in the credit value of an existing unit will require a new unit code to be created.

<sup>&</sup>lt;sup>2</sup> Where you are proposing a teaching pattern outside of the University agreed patterns, you should provide a mapping document for the course against the University standard patterns of assessment points, exam boards, terms dates and breaks

#### October start

# Units for Year 3 for Academic Year 2020/21..... (Foundation Year where applicable)

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
STI025-3	Architectural Engineering Project	ow	Core	ΤY	30
NEWSTI00 2-3	Environmental Science and Building Services	ow	Core	SEM2	15
STI012-3	Architectural Design and Practice	ow	Core	SEM2	15
NEWSTI02 2-3	Digital Analysis in Structural Design	ow	Core	SEM1	15
NEWSTI00	Emerging Technology and Sustainability				
3-3		OW	Core	SEM1	15
STI014-3	Architectural Planning	ow	Core	SEM1	15
STINEW00 1-3	Engineering Design Project	ow	Core	SEM2	15

#### February start

Units for Year 3 for Academic Year 2020/21.....

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
STI025-3	Architectural Engineering Project	ow	Core	FY	30
NEWSTI01 3-3	Environmental Science and Building Services	ow	Core	SEM2	15
NEWSTI02 2-3	Digital Analysis in Structural Design	ow	Core	SEM3	15
NEWSTI00	Emerging Technology and Sustainability	OW	Core	SEM3	15
<u> </u>		011	0010	OLINIS	10
STI012-3	Architectural Design and Practice	ow	Core	SEM2	15
STINEW00 1-3	Engineering Design Project	ow	Core	SEM2	15
STI014-3	Architectural Planning	OW	Core	SEM3	15

#### June start

# Units for Year 3 for Academic Year 2020/21..... (Professional Practice Year where appropriate)

Unit Code	Unit Name	Unit Location	Core/ Option*	Period of study	Credits
STI025-3	Architectural Engineering Project	ow	Core	FY	30
NEWSTI00 1-3	Engineering Design Project	ow	Core	SEM3	15
STI012-3	Architectural Design and Practice	ow	Core	SEM3	15
STI014-3	Architectural Planning	ow	Core	SEM1 (AY 2021/22)	15
NEWSTI02 2-3	Digital Analysis in Structural Design	ow	Core	SEM1 (AY 2021/22)	15
NEWSTI00 3-3	Emerging Technology and Sustainability	ow	Core	SEM1 (AY 2021/22)	15
NEWSTI00 2-3	Environmental Science and Building Services	ow	Core	SEM3	15

\*If your diet includes optional units, please ensure the appropriate rules are noted on the diet.

Please contact Student Records at studentrecords@beds.ac.uk with any queries.