

Engineering Faculty 2022 Language Implementation Plan

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1 Context

1.1 Language Policy

This Language Implementation Plan (LIP) was compiled in accordance with the "Language Policy of Stellenbosch University" that was approved by the University Council on 2 December 2021. As required in Section 7.4.3 of the Policy, the Language Implementation Plan records the language arrangements for learning and teaching in the Engineering Faculty.

This plan gives effect to the language planning requirements given in Sections 7.4.2.1 and 7.4.2.2 of the Policy:

- The English offering is maintained so as to achieve full accessibility to SU for academically deserving prospective and current students who prefer to study in English.
- The Afrikaans offering is managed so as to sustain access to SU for students who prefer to study in Afrikaans and to further develop Afrikaans as a language of tuition where reasonably practicable.

1.2 Consultation

The Language Implementation Plan is the result of consultation with the Faculty's Programme Committee (which includes four student representatives) and the Faculty's Management Committee. The members of these committees were sent a draft copy of the Language Implementation Plan and asked to their input, which was integrated by the Vice-dean: Teaching and Quality Assurance. The resulting plan was approved by the Faculty's Management Committee and submitted to the Academic Planning Committee, the Faculty Board and the Senate.

2 Aims of LIP and promotion of multilingualism

2.1 Faculty language of tuition vision

The Language Implementation Plan also largely gives effect to the Engineering Faculty's vision regarding language of tuition (approved by the Faculty Board on 19 February 2016). In this vision, the Faculty states:

- Student learning is very important to us. We want to formulate our language of tuition to enable students to learn effectively.
- We wish to promote a culture of accessibility and inclusivity in our Faculty and adapt our language of tuition, where necessary, as we strive towards this goal.
- We strive for excellence measured to international standards. As part of this we wish to develop and expand international exchanges on undergraduate level.
- We wish to contribute to the development of Afrikaans as an academic language, where possible.

2.2 Promotion of multilingualism

In most modules, except for the parallel medium modules in the first and second years, lectures are offered in English with Afrikaans summaries. The students in these modules also work in multilingual tutorials, often in informal groups. Students are therefore regularly exposed to multiple languages. In the first year of the BEng programmes, only one module is not offered in parallel medium. In this module, students are also exposed to multiple languages.

3 BEng language use in Teaching and Learning

Appendix A gives a table detailing the language arrangements of all undergraduate modules offered by the Engineering Faculty, as well as the modules in the four-year BEng programmes hosted by other faculties. It should be noted that the arrangements given in this plan for modules hosted by other faculties are subject to the particular faculty's approval.

3.1 Language of tuition in the first year of the BEng extended degree programmes

Except for Preparatory Technical Drawings 146, the first-year modules of the BEng extended degree programmes (EDPs) coincide with those of the first year of the BSc EDPs. The language of tuition for the common modules is determined by the Science Faculty.

Preparatory Technical Drawings 146 is offered in accordance with Section 7.1.4 of the Policy, with all information conveyed in English and all the key concepts also explained in Afrikaans. Further, simultaneous interpreting in Afrikaans is offered, according to Section 7.1.4.3 of the Policy.

Question papers for summative assessments are provided in both Afrikaans and English, in accordance with Section 7.1.9 of the Policy.

3.2 Language of tuition in the first year of the 4-year BEng programmes

Since all the BEng programmes share a common first year, except for one programme-specific module in each programme and two modules in the Data Engineering focus area, the common first year modules are offered in parallel medium, in accordance with Section 7.1.3 of the Policy. We envisage that the whole first year group will be divided into four class groups, with one class group receiving their lectures in Afrikaans and three class groups receiving their lectures in English.

The programme-specific modules in the first year are offered in accordance with Section 7.1.4 of the Policy, i.e. all information is conveyed at least in English with simultaneous interpreting in Afrikaans and with brief summaries in Afrikaans. Due to the project or laboratory nature of these modules, interpreting is limited to one period per week, except for Engineering Physics 152 where interpreting is required for two periods per week. The language specification and method of delivery for these modules are also designed to address Section 7.1.3.2 of the language policy, i.e. to promote integration within programmes.

The Data Engineering focus area of the BEng Electrical and Electronic Engineering programme share two modules in the first year with the BSc programmes and the BDatSci programme, respectively Probability Theory and Statistics 114 and Data Science 141. The former is offered by the Science Faculty in parallel medium, in accordance with Section 7.1.3 of the Policy. Data Science 141 is offered by the Economic and Management Sciences Faculty in accordance with Section 7.1.4 of the

Policy, with all information conveyed in English and all the key concepts also explained in Afrikaans, as well as simultaneous interpreting in Afrikaans, according to Section 7.1.4.3 of the Policy.

In all modules question papers for summative assessments are provided in both Afrikaans and English, in accordance with Section 7.1.9 of the Policy.

3.3 Language of tuition in the second year of the 4-year BEng programmes

The modules common to all or most of the BEng programmes, i.e. Engineering Mathematics 214, Applied Mathematics B 224, Engineering Mathematics 242 and Numerical Methods 262, are offered on the same basis as the first-year common modules (in accordance with Section 7.1.3 of the Policy), with one class group in Afrikaans and one to three class groups in English.

The Engineering Faculty extends the parallel medium offering (in accordance with Section 7.1.3 of the Policy) to some modules of the second year, subject to it being reasonably practicable and pedagogically sound (considering the availability and language proficiency of staff members, timetable and venue constraints, as well as SU's available resources and the competing demands on those resources).

If parallel medium is not offered for a given module in a particular year, the language of tuition for that module is arranged similarly to third year modules, as described in the section below.

In all modules question papers for summative assessments are provided in both Afrikaans and English, in accordance with Section 7.1.9 of the Policy.

3.4 Language of tuition in the third year of the 4-year BEng programmes

The modules are, where it is reasonably practicable (e.g. if the lecturer has the necessary language proficiency), offered according to Section 7.1.4 of the Policy, i.e. all information is conveyed at least in English. Further, a brief Afrikaans summary is given during each lecture. In these modules, questions asked in contact sessions are answered in the language of the question where it is reasonably practicable, e.g. if the lecturer has the necessary language proficiency.

If the lecturer does not have the language proficiency necessary to meet the requirements of Section 7.1.4 of the Policy, the lectures of the module are offered in English, according to Section 7.1.5.2 of the Policy.

In all modules question papers for summative assessments are provided in both Afrikaans and English, in accordance with Section 7.1.9 of the Policy.

3.5 Language of tuition in the fourth year of the 4-year BEng programmes

The modules are offered in English, in accordance with Section 7.1.8 of the Policy. As required by the Policy, all question papers will be provided in English. Question papers for major assessments (A1, A2, A3) will be provided in Afrikaans too, if students timeously request the Afrikaans papers (normally by the end of the third week of the semester, by e-mail to the lecturer offering the module). This deviation from Section 7.1.9 of the Policy is requested in terms of Section 7.1.13 of the Policy and justified by the following faculty-specific pedagogical and human resource considerations: (a) students should develop technical competency in academic English as a professional graduate attribute (b) external moderation by professional bodies is a requirement (c)

fewer of the newly appointed lecturers are sufficiently proficient in Afrikaans to set final year question papers in Afrikaans.

3.6 Postgraduate language of tuition

The modules are offered in English, in accordance with Section 7.1.8 and Section 7.1.10 of the Policy.

4 Language in administration

Communication of the Faculty, apart from tuition, is in both Afrikaans and English where it is reasonably practicable. When communication is in only one language, the needs of the readers or participants (including staff and students) are considered, with the provision that no one is excluded by the language of communication, in accordance with Section 7.2.2 of the Policy. During Faculty Board meetings all the information is conveyed at least in English.

5 Feedback mechanisms on implementation

For student feedback, the Faculty's regular feedback mechanisms are also employed for the implementation of the Language Implementation Plan. An important feedback mechanism is the meetings held once per semester with the class representatives: the Dean meets with the first year's class representatives and the respective programmes' host department chairpersons meet with the remaining undergraduate and postgraduate class representatives. Another feedback mechanism is that the Dean regularly attends meetings of the Engineering Student Council.

Feedback from staff is also obtained through the regular feedback mechanisms, which include departmental meetings and ad hoc meetings between the departmental chair and teaching staff.

6 Conclusion

The successful implementation of the University's language policy in the Engineering Faculty is evidenced by the absence of any substantive complaints from students in recent years. This plan continues with the good practices of the past.

Appendix A: Planned language offering per module

The table below gives pertinent details of the planned language offering in each of the modules in the four year BEng programmes, as well as Preparatory Technical Drawings 146 and Food Process Engineering 414 and 444. Entries in the table below are sorted by year and semester of the BEng, since the Language Implementation Plan is correspondingly structured. Modules not in the BEng programmes are listed first. Note that the language specifications of modules not offered by the Engineering Faculty are subject to the approval of the faculty offering the module.

The entries in the "Language format" column refer to sections in the Language Policy and this Language Implementation Plan, that is:

- 7.1.3: Afrikaans and English lectures offered in separate class groups, in accordance with Section 7.1.3 of the Policy.
- 7.1.4.1-2: The language offering is in accordance with Sections 7.1.4.1 and 7.1.4.2 of the Policy.
- 7.1.4.1-3: The language offering is in accordance with Sections 7.1.4.1 and 7.1.4.2 of the Policy, with simultaneous interpreting in Afrikaans in accordance with Section 7.1.4.3.
- 7.1.5.2: The lecturer allocated to this module does not have the language proficiency necessary to meet the requirements of Section 7.1.4 of the Policy, and the lectures of the module are offered in English, according to Section 7.1.5.2 of the Policy.
- 7.1.8: All information is conveyed at least in English; Afrikaans question papers may be requested by students, as described in Section 3.5 above.

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
13857414	0	1	Food Process Engineering 414	M&M Eng	7.1.8	3		1	15
13857444	0	2	Food Process Engineering 444	M&M Eng	7.1.8	3		1	15
12201146	0	2	Preparatory Technical Drawings 146	M&M Eng	7.1.4.1-3	3	3	1	16
20753124	1	1	Applied Mathematics B 124	Math Sci	7.1.3	4		4	15
49484123	1	1	Engineering Chemistry 123	Process Eng	7.1.3	4		4	15
46825123	1	1	Engineering Drawing 123	M&M Eng	7.1.3	1		4	15
38571115	1	1	Engineering Mathematics 115	Math Sci	7.1.3	5		4	15
59420113	1	1	Engineering Physics 113	Physics	7.1.3	2		4	8

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
56820114	1	1	Probability Theory and Statistics 114	Math Sci	7.1.3	3			16
14213113	1	1	Intercultural Communication (Eng) 113	Dean Eng	7.1.3	2		4	8
20753154	1	2	Applied Mathematics B 154	Math Sci	7.1.3	4		4	15
48321152	1	2	Chemistry C 152	Chemistry & PolSci	7.1.4.1-3	0	1	1	6
30317143	1	2	Computer Programming 143	E&E Eng	7.1.3	3		4	12
14026141	1	2	Data Science 141	Statistics	7.1.4.1-3	4		1	16
39802152	1	2	Electronic Engineering 152	E&E Eng	7.1.4.1-2	0		1	6
12599143	1	2	Electro-techniques 143	E&E Eng	7.1.3	3.5		4	15
38571145	1	2	Engineering Mathematics 145	Math Sci	7.1.3	5		4	15
59420152	1	2	Engineering Physics 152	Physics	7.1.4.1-3	2	2	1	6
31496152	1	2	Industrial Engineering 152	Indust Eng	7.1.4.1-3	0	1	1	6
39292152	1	2	Mechanical Engineering 152	M&M Eng	7.1.4.1-3	0	1	1	6
10886152	1	2	Mechatronic Engineering 152	M&M Eng	7.1.4.1-3	0	1	1	6
19712143	1	2	Strength of Materials 143	Civil Eng	7.1.3	3		4	12
20753224	2	1	Applied Mathematics B 224	Math Sci	7.1.3	3		4	15
11576224	2	1	Chemical Engineering 224	Process Eng	7.1.4.1-2	3		1	15
48321224	2	1	Chemistry C 224	Chemistry & PolSci	7.1.5.2	4		1	15
18481224	2	1	Civil Engineering 224	Civil Eng	7.1.4.1-2	3		1	15
59536214	2	1	Computer Science E 214	Math Sci	7.1.4.1-2	3		1	15
36153214	2	1	Computer Systems 214	E&E Eng	7.1.3	3		2	15
12599214	2	1	Electro-techniques 214	E&E Eng	7.1.3	3		2	15
18791212	2	1	Engineering Economics 212	Indust Eng	7.1.4.1-2	2		2	8
59552214	2	1	Engineering Geology 214	Earth Sciences	7.1.4.1-2	3		1	15
38571214	2	1	Engineering Mathematics 214	Math Sci	7.1.3	4		4	15
40142211	2	1	Practical Workshop Training 211	M&M Eng	7.1.4.1-2	0		1	0
23256212	2	1	Production Management 212	Indust Eng	7.1.5.2	2		2	8
19712224	2	1	Strength of Materials 224	Civil Eng	7.1.3	3		2	15
46779214	2	1	Systems and Signals 214	E&E Eng	7.1.3	3		2	15
22853214	2	1	Mathematical Statistics 214	Statistics	7.1.3	3		2	16
33863214	2	1	Thermodynamics A 214	M&M Eng	7.1.4.1-2	3		1	15

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
33863224	2	1	Thermodynamics A 224	Process Eng	7.1.4.1-2	3		1	15
59544214	2	1	Thermofluid Dynamics 214	M&M Eng	7.1.4.1-2	3		1	15
20753242	2	2	Applied Mathematics B 242	Math Sci	7.1.4.1-2	2		1	8
20753252	2	2	Applied Mathematics B 252	Math Sci	7.1.5.2	2		1	8
39020254	2	2	Building Materials 254	Civil Eng	7.1.4.1-2	3		1	15
11576254	2	2	Chemical Engineering 254	Process Eng	7.1.4.1-2	3		1	15
11576264	2	2	Chemical Engineering 264	Process Eng	7.1.4.1-2	3		1	15
48321254	2	2	Chemistry C 254	Chemistry & PolSci	7.1.5.2	4		1	15
36153245	2	2	Computer Systems 245	E&E Eng	7.1.4.1-2	3		1	15
12491245	2	2	Electronics 245	E&E Eng	7.1.4.1-2	3		1	15
43915244	2	2	Energy Systems 244	E&E Eng	7.1.4.1-2	3		1	15
59560244	2	2	Engineering Informatics 244	Civil Eng	7.1.4.1-2	3		1	15
38571242	2	2	Engineering Mathematics 242	Math Sci	7.1.3	2		2	8
59498243	2	2	Engineering Statistics 243	Process Eng	7.1.4.1-2	3		1	15
44415244	2	2	Fluid Mechanics 244	M&M Eng	7.1.4.1-2	3		1	15
39667254	2	2	Geotechnique 254	Civil Eng	7.1.4.1-2	3		1	15
47422244	2	2	Industrial Programming 244	Indust Eng	7.1.4.1-2	2		1	15
39705244	2	2	Introductory Machine Design 244	M&M Eng	7.1.4.1-2	1		1	15
39705254	2	2	Introductory Machine Design 254	M&M Eng	7.1.4.1-2	2		1	15
34134244	2	2	Manufacturing Processes 244	Indust Eng	7.1.4.1-2	2		1	15
30325244	2	2	Materials Science A 244	M&M Eng	7.1.4.1-2	3		2	15
36323262	2	2	Numerical Methods 262	Math Sci	7.1.3	2		2	8
40142241	2	2	Practical Workshop Training 241	M&M Eng	7.1.4.1-2	0		1	0
19712254	2	2	Strength of Materials 254	Civil Eng	7.1.5.2	3		1	15
19739244	2	2	Strength of Materials W 244	M&M Eng	7.1.4.1-2	3		1	15
46779244	2	2	Systems and Signals 244	E&E Eng	7.1.4.1-2	3		1	15
22853245	2	2	Mathematical Statistics 245	Statistics	7.1.4.1-2	2		1	8
22853246	2	2	Mathematical Statistics 246	Statistics	7.1.4.1-2	2		1	8
14019245	2	2	Data Engineering 245	Indust Eng	7.1.4.1-2	3		1	12
40150241	2	2	Vacation Training 241	Civil Eng	7.1.4.1-2	0		1	0
11576316	3	1	Chemical Engineering 316	Process Eng	7.1.5.2	3		1	15
11576317	3	1	Chemical Engineering 317	Process Eng	7.1.4.1-2	3		1	15
41696316	3	1	Chemical Engineering D 316	Process Eng	7.1.4.1-2	2		1	8

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
13362311	3	1	Complementary Studies (Eng) 311	Dean Eng	7.1.4.1-2	0		2	4
18139334	3	1	Computer Science 334	Math Sci	7.1.4.1-2	3		1	16
23965314	3	1	Control Systems 314	E&E Eng	7.1.4.1-2	3		1	15
46833314	3	1	Design (E) 314	E&E Eng	7.1.4.1-2	1		1	15
11949324	3	1	Electrical Drive Systems 324	E&E Eng	7.1.5.2	3		1	15
51357314	3	1	Electromagnetics 314	E&E Eng	7.1.4.1-2	3		1	15
12491315	3	1	Electronics 315	E&E Eng	7.1.4.1-2	3		1	15
59560314	3	1	Engineering Informatics 314	Civil Eng	7.1.4.1-2	3		1	15
59498314	3	1	Engineering Statistics 314	Stats & Actua	7.1.4.1-2	3		1	15
33928326	3	1	Heat Transfer A 326	Process Eng	7.1.5.2	3		1	15
14400324	3	1	Hydraulics 324	Civil Eng	7.1.4.1-2	3		1	15
16020314	3	1	Machine Design A 314	M&M Eng	7.1.4.1-2	2		1	15
45381314	3	1	Manufacturing Systems 314	Indust Eng	7.1.5.2	2		1	15
56804334	3	1	Modelling 334	M&M Eng	7.1.4.1-2	4		1	18
47902316	3	1	Particle Technology 316	Process Eng	7.1.4.1-2	3		1	15
65609314	3	1	Philosophy and Ethics 314	Philosophy	7.1.4.1-2	3		1	4
23256314	3	1	Production Management 314	Indust Eng	7.1.4.1-2	3		1	15
14215311	3	1	Technical Communication 311	Dean Eng	7.1.4.1-2	2		1	4
19739334	3	1	Strength of Materials W 334	M&M Eng	7.1.4.1-2	3		1	15
46779315	3	1	Systems and Signals 315	E&E Eng	7.1.4.1-2	3		1	15
21040324	3	1	Transport Science 324	Civil Eng	7.1.4.1-2	3		1	15
13184324	3	1	Water Treatment 324	Civil Eng	7.1.4.1-2	3		1	15
11576344	3	2	Chemical Engineering 344	Process Eng	7.1.5.2	3		1	15
11576367	3	2	Chemical Engineering 367	Process Eng	7.1.5.2	3		1	15
11576354	3	2	Chemical Engineering 354	Process Eng	7.1.5.2	3		1	15
41696356	3	2	Chemical Engineering D 356	Process Eng	7.1.4.1-2	1		1	15
23965344	3	2	Control Systems 344	E&E Eng	7.1.4.1-2	3		1	15
23965354	3	2	Control Systems 354	M&M Eng	7.1.4.1-2	4		1	18
13856344	3	2	Data Analytics (Eng) 344	Indust Eng	7.1.4.1-2	3		1	15
13856324	3	2	Data Analytics (Eng) 324	E&E Eng	7.1.4.1-2	3		1	15
46833344	3	2	Design (E) 344	E&E Eng	7.1.4.1-2	1		1	15
51357344	3	2	Electromagnetics 344	E&E Eng	7.1.4.1-2	3		1	15
12491344	3	2	Electronics 344	E&E Eng	7.1.4.1-2	3		1	15

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
12491365	3	2	Electronics 365	E&E Eng	7.1.4.1-2	3		1	15
43915344	3	2	Energy Systems 344	E&E Eng	7.1.5.2	3		1	15
18791354	3	2	Engineering Economics 354	Indust Eng	7.1.4.1-2	3		1	15
39667354	3	2	Geotechnique 354	Civil Eng	7.1.4.1-2	3		1	15
14400354	3	2	Hydraulics 354	Civil Eng	7.1.4.1-2	3		1	15
53937354	3	2	Industrial Management 354	Indust Eng	7.1.4.1-2	3		1	15
16039344	3	2	Machine Design B 344	M&M Eng	7.1.4.1-2	2		1	15
47988345	3	2	Mineral Processing 345	Process Eng	7.1.5.2	3		1	15
59528345	3	2	Operations Research (Eng) 345	Indust Eng	7.1.4.1-2	3		1	15
46167344	3	2	Quality Assurance 344	Indust Eng	7.1.4.1-2	2		1	15
36307354	3	2	Structural Design 354	Civil Eng	7.1.4.1-2	3		1	15
46779344	3	2	Systems and Signals 344	E&E Eng	7.1.4.1-2	3		1	15
19984354	3	2	Theory of Structures 354	Civil Eng	7.1.4.1-2	3		1	15
59544344	3	2	Thermofluid Dynamics 344	M&M Eng	7.1.4.1-2	3		1	15
21040364	3	2	Transport Science 364	Civil Eng	7.1.4.1-2	3		1	15
40150342	3	2	Vacation Training 342	Civil Eng	7.1.4.1-2	0		1	0
40150351	3	2	Vacation Training 351	Indust Eng	7.1.4.1-2	0		1	0
40150341	3	2	Vacation Training 341	M&M Eng	7.1.4.1-2	0		1	0
40150361	3	2	Vacation Training 361	Process Eng	7.1.4.1-2	0		1	0
23477354	3	2	Vibration and Noise 354	M&M Eng	7.1.4.1-2	3		1	12
13363392	3	Y	Internship (Eng) 392	Dean Eng	7.1.4.1-2	0		1	0
13363393	3	Y	Internship (Eng) 393	Dean Eng	7.1.4.1-2	0		1	0
11576424	4	1	Chemical Engineering 424	Process Eng	7.1.8	3		1	15
11576426	4	1	Chemical Engineering 426	Process Eng	7.1.8	3		1	15
59536414	4	1	Computer Science E 414	Math Sci	7.1.8	3		1	15
36153414	4	1	Computer Systems 414	E&E Eng	7.1.8	3		1	15
23965414	4	1	Control Systems 414	E&E Eng	7.1.8	3		1	15
13856414	4	1	Data Analytics (Eng) 414	E&E Eng	7.1.8	3		1	15
12491414	4	1	Electronics 414	E&E Eng	7.1.8	3		1	15
43915414	4	1	Energy Systems 414	E&E Eng	7.1.8	3		1	15
43915424	4	1	Energy Systems 424	E&E Eng	7.1.8	3		1	15
51365434	4	1	Energy Systems M 434	M&M Eng	7.1.8	3		1	15
50431414	4	1	Environmental Engineering 414	Process Eng	7.1.8	3		1	15
41726414	4	1	Finite Element Methods 414	M&M Eng	7.1.8	3		1	15

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
33928414	4	1	Heat Transfer A 414	M&M Eng	7.1.8	3		1	15
52124414	4	1	High Frequency Technique 414	E&E Eng	7.1.8	3		1	15
21350424	4	1	Hydraulic Engineering 424	Civil Eng	7.1.8	3		1	15
14397424	4	1	Hydrology 424	Civil Eng	7.1.8	3		1	15
44792414	4	1	Industrial Ergonomics 414	Indust Eng	7.1.8	3		1	15
48062414	4	1	Information Systems 414	Indust Eng	7.1.8	2		1	15
11745414	4	1	Maintenance Management 414	Indust Eng	7.1.8	3		1	15
39292414	4	1	Mechanical Engineering 414	M&M Eng	7.1.8	3		1	15
50458424	4	1	Mechatronics 424	M&M Eng	7.1.8	3		1	18
47988415	4	1	Mineral Processing 415	Process Eng	7.1.8	3		1	15
53678414	4	1	Numerical Fluid Dynamics 414	M&M Eng	7.1.8	3		1	15
59528415	4	1	Operations Research (Eng) 415	Indust Eng	7.1.8	3		1	15
65609414	4	1	Philosophy and Ethics 414	Philosophy	7.1.8	2		1	4
30279418	4	1	Project (Civil Engineering) 418	Civil Eng	7.1.8	1		1	30
51993412	4	1	Project Management 412	Indust Eng	7.1.8	3		1	12
36307424	4	1	Structural Design 424	Civil Eng	7.1.8	3		1	15
46779414	4	1	Systems and Signals 414	E&E Eng	7.1.8	3		1	15
20419414	4	1	Telecommunication 414	E&E Eng	7.1.8	3		1	15
21040434	4	1	Transport Science 434	Civil Eng	7.1.8	3		1	15
36315446	4	2	Advanced Design (Civil) 446	Civil Eng	7.1.8	2		1	15
13362441	4	2	Complementary Studies (Eng) 441	Dean Eng	7.1.8	0		1	4
13362451	4	2	Complementary Studies (Eng) 451	M&M Eng	7.1.8	2		1	4
51373454	4	2	Engineering Management 454	Civil Eng	7.1.8	5		1	15
59501444	4	2	Enterprise Design 444	Indust Eng	7.1.8	2		1	15
59455444	4	2	Entrepreneurship (Eng) 444	E&E Eng	7.1.8	3		1	15
50431442	4	2	Environmental Engineering 442	Process Eng	7.1.8	3		1	8
50431452	4	2	Environmental Engineering 452	Civil Eng	7.1.8	3		1	8
10618442	4	2	Industrial Practice 442	Indust Eng	7.1.8	2		1	8
23256444	4	2	Production Management 444	Indust Eng	7.1.8	3		1	12
99913444	4	2	Introductory Systems Engineering 444	M&M Eng	7.1.8	3		1	15
30279458	4	2	Project (Civil Engineering) 458	Civil Eng	7.1.8	1		1	30
46795448	4	2	Project (E) 448	E&E Eng	7.1.8	0		1	45
59471444	4	2	Quality Management 444	Indust Eng	7.1.8	2		1	15

Module code	BEng Year	Semester	Module name	Home Department	Language format	Lecture periods per week	Periods interpreted per week	Number of class groups	Credits
53945442	4	2	Simulation 442	Indust Eng	7.1.8	3		1	12
40150451	4	2	Vacation Training 451	Indust Eng	7.1.8	0		1	0
40150441	4	2	Vacation Training 441	M&M Eng	7.1.8	0		1	0
13683478	4	Y	Final Year Project (C) 478	Process Eng	7.1.8	0		1	32
47929488	4	Y	Design Project 488	Process Eng	7.1.8	2		1	47
25445498	4	Y	Industrial Project 498	Indust Eng	7.1.8	0		1	30
39179478	4	Y	Mechanical Project 478	M&M Eng	7.1.8	2		1	45
56790488	4	Y	Mechatronic Project 488	M&M Eng	7.1.8	2		1	45
56790478	4	Y	Mechatronic Project 478	M&M Eng	7.1.8	2		1	45