

1.2.1 Degree programmes and requirements

Undergraduate study

Bachelor of Engineering in Civil Engineering

Curriculum structure for the following students:

- Admitted to Year 1 in AY04/05 and streamed to CEE in AY05/06
- Admitted to CEE Year 2 in AY05/06
- Admitted to Year 1 in AY05/06 and streamed to CEE in AY06/07
- Admitted to CEE Year 2 in AY06/07
- Admitted to Year 1 in AY06/07 and streamed to CEE in AY07/08.
- Admitted to CEE Year 2 in AY07/08
- Admitted to Year 1 in AY07/08 and streamed to CEE in AY08/09
- Admitted to CEE Year 2 in AY08/09.

Year 1 Semesters 1 and 2	
Course code and title	AUs
FE1001 Physics I	4
FE1002 Physics II	4
FE1003 Chemistry	3
BS1004 Life Sciences	3
FE1005 Materials Science	3
FE1006 Mathematics I	3
FE1007 Mathematics II	3
FE1008 Computing	3
HW110 Effective Communication	2
FE1071 Lab 1A	1
FE1072 Lab 1B	1
HE191 Principle of Economics (GER-PE1)	3
GER-PE2	3
Total AUs	36

GER: General Education Requirement

Students with only GCE 'O' level Physics qualification are required to take **FE0001 Foundation Physics (3AUs)**

Students who have not passed or are not exempted from the Qualifying English Test are required to take **HW001 English Proficiency (0AUs)**

Year 2 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2001 Engineering Probability and Statistics	3		G264
CV2101 Mechanics of Materials	4		G262
CV2301 Soil Mechanics	3		CL332

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CV2601 Fluid Mechanics	3		G263
CV2701 Laboratory 2A	1		CL272
CV2901 Engineering Drawing and Measurement	2		
FE0001 Foundation Physics	3 #		
CV2000 Essential Mathematics	3 #		
GER-PE3	3		
GER-UE1	3		
Total AUs	22 (# Not included)		

GER: General Education Requirement
PE: Prescribed Elective
UE: Unrestricted Elective

Direct entry students to the Second Year are required to take FE0001 Foundation Physics and CV2000 Essential Mathematics as part of their curriculum requirement in lieu of 6AUs of Unrestricted Electives. Direct entry students who have not passed or are not exempted from the Qualifying English Test are required to take HW001 English Proficiency (0AUs)

Year 2 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2002 Computational Methods	3	FE1007	G265
CV2003 Civil Engineering Materials	3		CL371
HW210 Technical Communication	2		
CV2102 Structures I	3	CV2101	CL282
CV2302 Geotechnical Engineering	3	CV2301	
CV2602 Water Resources Engineering	3	CV2601	
CV2702 Laboratory 2B	1		CL272
CV2902 Engineering Innovation and Design	1		CL279
GER-UE2	3		
Total AUs	22		

UE: Unrestricted Elective
GER: General Education Requirement

Year 3 Semester 1			
Subject code and title	AUs	Pre-req	Replaced course (if any)
CV3101 Structures II	3	CV2102	CL283
CV3201 Reinforced Concrete Design	3	CV2102	CL311

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CV3202 Steel Design	3	CV2102	CL312
CV3301 Foundation Engineering	3	CV2301	CL431
CV3401 Transportation Engineering	3		CL341
CV3501 Environmental Engineering	3		CL451
GER-PE4	3		
Total AUs	21		

PE: Prescribed Elective

GER: General Education Requirement

Year 3 Semester 2 (or later in Year 4)			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV3901 Industrial Attachment #	10	*	
Total AUs	10		

GER: General Education Requirement

IO: Industrial Orientation

* Year 3 standing and have completed at least four semesters of study (two semesters of study for Direct entry students to the Second Year)

Students doing Industrial Orientation (IO) (CV3903 - 4AUs) instead of IA (CV3901 - 10AUs) will be taking courses in second semester. IO requires students to take 2GEs to make up for the 6AUs. More details for the various options (including exemption of IA) can be found at the following link at the Careers and Attachment Office website: <http://www.ntu.edu.sg/studentlink/opa/ia/options/> Also, CEE students will be given the option to do their attachment at the end of their study.

Year 4 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4000 Engineers and Society	3		
CV4201 Civil Engineering Management	3	#	CL421
CV4901 Final Year Project	5	@	
CV4902 Integrated Design	3	#	CL402
CVxxxx Major-PE1	3		
CVxxxx Major-PE2	3		
Total AUs	20		

80AUs (excluding GE/UE) and completed five or more semesters of study (49AUs (excluding IA, excluding GE/UE) and completed three semesters for direct entry students)

@ Fourth Year standing

Major-PE: Prescribed electives in the Major's curriculum

Year 4 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
HW310 Professional Communication	2	@	
CV4202 Human Resources Management and Entrepreneurship	3		CL422
CV4901 Final Year Project	5	@	
CVxxxx Major-PE3	3		
CVxxxx Major-PE4	3		
GER-PE5	3		
GER-UE3	3		
Total AUs	22		

80AUs (excluding GE/UE) and completed five or more semesters of study (49AUs (excluding IA, excluding GE/UE) and completed three semesters for direct entry students)

@ Year 4 standing

GER: General Education Requirement

PE: Prescribed Elective

UE: Unrestricted Elective

Major-PE: Prescribed electives in the Major's curriculum

Major Prescribed Electives of Degree of Bachelor in Civil Engineering (B.Eng.)

Year 4: Prescribed Electives (not every course will be offered at any one time)			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4151 Structures III	3	CV3101	
CV4152 Advanced Steel Structures	3	CV3202	
Construction Stream			
CV4251 CE Construction Technology	3	Year 4 standing	
CV4252 Engineering Economics and 3 Finance	3	Year 3 standing	
CV4254 Prestressed Concrete	3	CV3201	
Geotechnical Stream			
CV4352 Excavation and Retaining Walls	3	CV3301	
CV4353 Ground Engineering	3	CV2302	
Transportation Stream			
CV4451 Traffic Engineering	3	CV3401	
CV4452 Highway Engineering	3	CV3401	

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CV4453 Airport Engineering	3	CV3401	
Environment Stream			
CV4551 Water Supply Engineering	3	CV3501	
CV4552 Waste Water Engineering	3	CV3501	
CV4553 Solid Waste Engineering	3	-	
CV4554 Air Pollution Control Engineering	3	-	
CV4555 Surface Water quality	3	-	
Water Resources Stream			
CV4651 Environmental or Hydraulics	3	CV2602 Or EN3601	
CV4652 Applied Hydrology	3	CV2602 Or EN3601	
CV4653 Sediment Transport	3	CV2602 Or EN3601	
Offshore and Coastal Stream			
CV4751 Coastal Engineering	3	CV2602 or EN3601	
CV4752 Offshore Engineering	3	CL312 or CV3202	
CV4753 Offshore Hydrodynamics	3	CV2602 or EN3601	

#80AUs (excluding IA, excluding GE/UE) and completed five or more semesters of study (49AUs (excluding IA, excluding GE/UE) and completed three semesters for direct entry students)

Bachelor of Engineering in Environmental Engineering

Curriculum Structure for the following students:

- Admitted to Year 1 in AY04/05 and streamed to ENE in AY05/06
- Admitted to ENE Year 2 in AY05/06
- Admitted to Year 1 in AY05/06 and streamed to ENE in AY06/07
- Admitted to ENE Year 2 in AY06/07
- Admitted to Year 1 in AY06/07 and streamed to ENE in AY07/08.
- Admitted to ENE Year 2 in AY07/08
- Admitted to Year 1 in AY07/08 and streamed to ENE in AY08/0
- Admitted to ENE Year 2 in AY08/09.

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Year 1 Semesters 1 and 2	
Course code and title	AUs
FE1001 Physics I	4
FE1002 Physics II	4
FE1003 Chemistry	3
BS1004 Life Sciences	3
FE1005 Materials Science	3
FE1006 Mathematics I	3
FE1007 Mathematics II	3
FE1008 Computing	3
HW110 Effective Communication	2
FE1071 Lab 1A	1
FE1072 Lab 1B	1
HE191 Principle of Economics (GER-PE1)	3
GER-PE2	3
Total AUs	36

GER: General Education Requirement

Students with only GCE 'O' level Physics qualification are required to take **FE0001 Foundation Physics (3AUs)**

Students who have not passed or are not exempted from the Qualifying English Test are required to take **HW001 English Proficiency (0AUs)**.

Year 2 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2001 Engineering Probability and Statistics	3		
CV2101 Mechanics of Materials	4		
CV2601 Fluid Mechanics	3		
EN2501 Environmental Chemistry	2		
CV2701 Laboratory 2A	1		
HW210 Technical Communication	2		
FE0001 Foundation Physics	3#		
CV2000 Essential Mathematics	3#		
GER-PE3	3		
GER-UE1	3		

COLLEGE OF ENGINEERING:
SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING

Total AUs	21 (# Not included)		
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GER: General Education Requirement

PE: Prescribed Elective

UE: Unrestricted Elective

Direct entry students to the Second Year are required to take FE0001 Foundation Physics and CV2000 Essential Mathematics as part of their curriculum requirement in lieu of 6AUs of Unrestricted Electives. Direct entry students who have not passed or are not exempted from the Qualifying English Test are required to take HW001 English Proficiency (0AUs)

Year 2 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2002 Computational Methods	3	FE1007	
CV2901 Engineering Drawing and Measurement	2		
CV2102 Structures I	3	CV2101	
EN2502 Environmental Processes	3		
EN2503 Environmental Microbiology	3		
EN2603 Hydrology	3		
EN2703 Laboratory 2C	1		
CV2902 Engineering Innovation and Design	1		
GER-UE2	3		
Total AUs	22		

UE: Unrestricted Elective

GER: General Education Requirement

Year 3 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN3502 Water Supply Engineering	3	CV2601	
EN3503 Wastewater Engineering	3		
EN3504 Solid Waste Management	3		
EN3505 Geo-Environmental Engineering	3		
EN3601 Hydraulics	3	CV2601	
CV3203 Structural Design	4	CV2102	
GER-PE4	3		
Total AUs	22		

PE: Prescribed Elective

COLLEGE OF ENGINEERING:
SCHOOL OF CIVIL AND ENVIRONMENTAL ENGINEERING

GER: General Education Requirement

Year 3 Semester 2 (or later in Year 4)			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN3901 Industrial Attachment #	10	*	
Total AUs	10		

GER: General Education Requirement

IO: Industrial Orientation

* Year 3 standing and have completed at least four semesters of study (two semesters of study for Direct entry students to the Second Year)

Students doing Industrial Orientation (IO)

(EN3903 - 4AUs) instead of IA (EN3901 - 10AUs) will be taking courses in second semester. IO requires students to take 2GEs to make up for the 6AUs. More details for the various options (including exemption of IA) can be found at the following link at the Careers and Attachment Office website <http://www.ntu.edu.sg/studentlink/opa/ia/options/>. Also, CEE students will be given the option to do their attachment at the end of their study.

Year 4 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4000 Engineers and Society	3		
CV4201 Civil Engineering Management	3	#	
EN4901 Final Year Project	5	@	
EN4902 Integrated Design	3	#	
ENxxxx (Major-PE1)	3		
ENxxxx (Major-PE2)	3		
Total AUs	20		

80AUs (excluding GE/UE) and completed five or more semesters of study (49AUs (excluding IA, excluding GE/UE) and completed three semesters for direct entry students)

@ Year 4 standing

Major-PE: Prescribed electives in the Major's curriculum

Year 4 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
HW310 Professional Communication	2	@	
CV4202 Human Resources Management and Entrepreneurship	3		CL422
EN4901 Final Year Project	5	@	

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ENxxxx - (Major-PE3)	3		
ENxxxx - (Major-PE4)	3		
GER-PE5	3		
GER-UE3	3		
Total AUs	22		

80AUs (excluding GE/UE) and completed five or more semesters of study (49AUs (excluding IA, excluding GE/UE) and completed three semesters for direct entry students)

@ Year 4 standing

GER: General Education Requirement

PE: Prescribed Elective

UE: Unrestricted Elective

Major-PE: Prescribed electives in the Major's curriculum

Major Prescribed Electives of Degree of Bachelor in Environmental Engineering (B.Eng.)

Year 4: Prescribed Electives (not every course will be offered at any one time)			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN4554 Air Pollution Control Engineering	3		
EN4555 Surface Water Quality	3	Year 3 Standing	
EN4556 Membrane Water Reclamation Technology	3		
EN4559 Biotechnology in Environmental Engineering	3	Year 3 Standing	
EN4651 Environmental Hydraulics	3	EN3601	
EN4852 Integrated Environmental Management	3	Year 3 Standing	
CV4251 Civil Engineering Construction Technology**	3	Year 4 Standing	
CV4252 Engineering Economics & Finance**	3	Year 3 Standing	
CV4652 Applied Hydrology**	3	EN3601	
CV4653 Sediment Transport**	3	EN3601	
CV4751 Coastal Engineering**	3	EN3601	

** In order to give ENE students a wider choice of PE subjects, the above mentioned CV subjects which are also of relevance and interest to ENE students are available for selection. ENE students are allowed to take up to a maximum of 2 CV PE subjects from the approved list.

Bachelor of Science in Maritime Studies

Curriculum Structure of Bachelor of Science in Maritime Studies

This is a four-year programme and is hosted by the School of Civil and Environmental Engineering with participants from other schools in NTU and overseas universities.

Year 1 Semesters 1 and 2	
Course code and title	AUs
MB101 Accounting	3
MB106 Fundamentals of Management	3
MT1202 Introduction to Maritime Industry	3
HW110 Effective Communication	2
GER-UE1	3
GER-PE1	3
HE191 Principles of Economics	3
MB107 Fundamentals of Business Law	3
MT1101 Mathematics I for Maritime Studies	3
MT1201 Transport Liability and INCO Terms	3
MT1301 Maritime Technology I	3
GER-PE2	3
Total AUs	35

GER: General Education Requirement

PE: Prescribed Elective

UE: Unrestricted Elective

HW001 English Proficiency (for students who have not passed or are not exempted from "the Qualifying English Test")
(0AUs)

Year 2 Semester 1	
Course code and title	AUs
MT2101 Mathematics II for Maritime Studies	3
MT2201 Shipping Economics	3

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MT3301 Maritime Technology II	3
MT3304 Information Technology Management	3
MT2301 Statistics (CV2001)	3
Total AUs	15

Year 2 Semester 2	
Course code and title	AUs
MT2204 Shipping Management	3
MT2205 Port Economics	3
MT2206 International Framework of Shipping	3
MT2302 Maritime Science I	3
HW210 Technical Communication	2
GER-PE3	3
Total AUs	17

GER: General Education Requirement
PE: Prescribed Elective

Year 3 Semester 1	
Course code and title	AUs
MT3203 Introduction to Marine Insurance	3
MT3202 Maritime Law	3
MT2202 Ship Accounting	3
MT2203 Organisation of a Ship Owning Entity	3
GER-PE4	3
Total AUs	15

Year 3 Semester 2	
Course code and title	AUs
MT3201 Ship Chartering	3
MT3204 Quality Management in Shipping	3
MT3302 Maritime Science II (EM101)	3
MT3303 Spatial Information Science (CV8801)	3
MT3502 Maritime Professionals and Society	3
GER-UE2	3

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MT3401 Industrial Immersion (during semester break)	4
Total AUs	22

GER: General Education Requirement
PE: Prescribed Elective
UE: Unrestricted Elective

Final Year Semesters 1 and 2	
Course code and title	AUs
MT4201 Shipping Logistics	3
MT4502 Human Resources Management and Entrepreneurship (CV4202)	3
MT4203 Shipping Strategy	3
HW310 Professional Communication	2
MT4401 Research Project (Semester 1)	5
MT4xxx Prescribed Elective 1	3
MT4202 Essentials of Project Management	3
MT4401 Research Project (Semester 2)	5
MT4xxx Prescribed Elective 2	3
MT4xxx Prescribed Elective 3	3
MT4xxx Prescribed Elective 4	3
GER-UE3	3
GER-PE5	3
Total AUs	39 %

GER: General Education Requirement
PE: Prescribed Elective
UE: Unrestricted Elective
% MT4XXX (Any 3 of the 4 Prescribed Electives)

Double Degree in Civil Engineering and Economics

Year 1 Semesters 1 and 2	
Course code and title	AUs
FE1001 Physics I	4
FE1006 Mathematics I	3
FE1008 Computing	3
FE1071 Laboratory 1A	1
HE101 Microeconomic Principles	3
HE102 Macroeconomic Principles	3
HE103 Basic Mathematics for Economists	3
FE1002 Physics II	4

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FE1007 Mathematics II	3
FE1003 Chemistry	3
FE1072 Laboratory 1B	1
HE104B Introduction to Probability and Statistical Inference	3
HE201 Intermediate Microeconomics	4
HW110 Effective Communication	2
Total AUs	40

Students with only GCE 'O' level Physics qualification are required to take **FE0001 Foundation Physics (3AUs)**
Students who have not passed or are not exempted from the Qualifying English Test are required to take **HW001 English Proficiency (0AUs)**

Year 2 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2101 Mechanics of Materials	4		G262
CV2001 Engineering Probability and Statistics	3		G264
CV2301 Soil Mechanics	3		CL332
CV2601 Fluid Mechanics	3		G263
CV2901 Engineering Drawing & Measurement	2		
HE202 Intermediate Macroeconomics	4	HE102 or AB106 or HE191	
HE204B Principles of Econometrics	4	HE104B or MAS215 and MAS315	
Total AUs	23		

Year 2 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2102 Structures I	3	CV2101 or G162	CL282
CV2002 Computational Methods	3	FE1007 or G165	G265
CV2302 Geotechnical Engineering	3	CV2301 or CV231	CL431
CV2602 Water Resources Engineering	3	CV2601 or G263	
CV2701 Laboratory 2A	1		
CV2702 Laboratory 2B	1		
CV2003 Civil Engineering Materials	3		
CV2902 Engineering Innovation and Design	1		CL279
HW210 Technical Communication	2		
Total AUs	20		

Year 3 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV3101 Structures II	3	CV2102 or CL282	CL283
CV3201 Reinforced Concrete Design	3	CV2102 or CL282	CL311
CV3202 Steel Design	3	CV2102 or CL282	CL312
CV3301 Foundation Engineering	3	CV2301 or CL332 or CV231	CL431

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CV3401 Transportation Engineering	3		CL341
CV3501 Environmental Engineering	3		CL451
HE312 Political Economy of East Asia	4	HE191 or HE101 or HE102 or HE192 or AB106	
Total AUs	22		

Year 3 Semester 2 (or later)			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV3901 Industrial Attachment #	10	*	
Total AUs	10		

* Year 3 standing and have completed at least four semesters of study (two semesters of study for Direct entry students to the Second Year)

Students doing Industrial Orientation (IO) (CV3903 - 4AUs) instead of IA (CV3901 - 10AUs) will be taking courses in second semester. IO requires students to take 2GEs to make up for the 6AUs. More details for the various options (including exemption of IA) can be found at the following link at the Careers and Attachment Office website: <http://www.ntu.edu.sg/studentlink/opa/ia/options/> Also, CEE students will be given the option to do their attachment at the end of their study.

Year 4 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4201 Civil Engineering Management	3	Year 4 standing	CL421
CV4902 Integrated Design	3	Year 4 standing	CL402
CV4xxx Technical Elective 1	3		
Econs PE 1	4		
Econs PE 2	4		
CV4000 Engineers and Society	3		
Total AUs	20		

Year 4 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4xxx Technical Elective 2	3		
CV4xxx Technical Elective 3	3		
Econs PE 3	4		
Econs PE 4	4		
Econs PE 5	4		
CV4202 Human Resources Management and Entrepreneurship	3		CL422
HW310 Professional Communication	2		
Total AUs	23		

Year 5 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4901 Final Year Project	5	Year 4 standing	
Econs PE 6	4		
Econs PE 7	4		
Econs PE 8	4		

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Econs PE 9	4		
Total AUs	21		

Year 5 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV4901 Final Year Project	5	Year 4 standing	
Econs PE 10	4		
Econs PE 11	4		
Econs PE 12	4		
Econs PE 13	4		
Total AUs	21		

Double Degree in Environmental Engineering and Economics

Year 1 Semesters 1 and 2	
Course code and title	AUs
FE1001 Physics I	4
FE1006 Mathematics I	3
FE1008 Computing	3
FE1071 Laboratory 1A	1
HE101 Microeconomic Principles	3
HE102 Macroeconomic Principles	3
HE103 Basic Mathematics for Economists	3
FE1002 Physics II	4
FE1007 Mathematics II	3
FE1003 Chemistry	3
FE1072 Laboratory 1B	1
HE104B Introduction to Probability and Statistical Inference	3
HE201 Intermediate Microeconomics	4
HW110 Effective Communication	2
Total AUs	40

Students with only GCE 'O' level Physics qualification are required to take **FE0001 Foundation Physics (3AUs)**
Students who have not passed or are not exempted from the Qualifying English Test are required to take **HW001 English Proficiency (0AUs)**

Year 2 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2101 Mechanics of Materials	4		G262
CV2001 Engineering Probability and Statistics	3		G264
EN2501 Environmental Chemistry	2		G260, G261, G269, CL331
CV2601 Fluid Mechanics	3		G263
CV2901 Engineering Drawing & Measurement	2		
HE202 Intermediate Macroeconomics	4	HE102 or AB106 or HE191	
HE204B Principles of Econometrics	4	HE104B or MAS215	

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		and MAS315	
Total AUs	22		

Year 2 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV2102 Structures I	3	CV2101 or G162	CL282
CV2002 Computational Methods	3	FE1007 or G165	G265
EN2502 Environmental Process	3		G260, G261,G269, CL331
EN2503 Environmental Microbiology	3		G260, G261,G269, CL331
CV2701 Laboratory 2A	1		
EN2703 Laboratory 2C	1		
EN2603 Hydrology	3		
CV2902 Engineering Innovation and Design	1		CL279
HW210 Technical Communication	2		
Total AUs	20		

Year 3 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
CV3203 Structural Design	4	CV2102 or CL282	
EN3502 Water Supply Engineering	3	CV2601	
EN3503 Wastewater Engineering	3		
EN3504 Solid Waste Management	3		
EN3601 Hydraulics	3	CV2601 Or CL263 or G263	CL361
EN3505 Geo-Environmental Engineering	3		
HE312 Political Economy of East Asia	4	HE191 or HE101 or HE102 or HE192 or AB106	
Total AUs	23		

Year 3 Semester 2 (or later)			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN3901 Industrial Attachment #	10	*	
Total AUs	10		

* Year 3 standing and have completed at least four semesters of study (two semesters of study for Direct entry students to the Second Year)

Students doing Industrial Orientation (IO) (EN3903 - 4AUs) instead of IA (EN3901 - 10AUs) will be taking courses in second semester. IO requires students to take 2GEs to make up for the 6AUs. More details for the various options (including exemption of IA) can be found at the following link at the Careers and Attachment Office website: <http://www.ntu.edu.sg/studentlink/opa/ia/options/> Also, CEE students will be given the option to do their attachment at the end of their study.

Year 4 Semester 1			
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Course code and title	AUs	Pre-req	Replaced course (if any)
CV4201 Civil Engineering Management	3	Year 4 standing	CL421
EN4902 Integrated Design	3	Year 4 standing	
EN4xxx Technical Elective 1	3		
Econs PE 1	4		
Econs PE 2	4		
CV4000 Engineers and Society	3		
Total AUs	20		

Year 4 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN4xxx Technical Elective 2	3		
EN4xxx Technical Elective 3	3		
Econs PE 3	4		
Econs PE 4	4		
Econs PE 5	4		
CV4202 Human Resources Management and Entrepreneurship	3		CL422
HW310 Professional Communication	2		
Total AUs	23		

Year 5 Semester 1			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN4901 Final Year Project	5	Year 4 standing	
Econs PE 6	4		
Econs PE 7	4		
Econs PE 8	4		
Econs PE 9	4		
Total AUs	21		

Year 5 Semester 2			
Course code and title	AUs	Pre-req	Replaced course (if any)
EN4901 Final Year Project	5	Year 4 standing	
Econs PE 10	4		
Econs PE 11	4		
Econs PE 12	4		
Econs PE 13	4		
Total AUs	21		

Bachelor of Science in Maritime Studies with Business Major

Year 1 Semesters 1 and 2	
Course code and title	AUs
AA101 Accounting 1	4
AB102 Financial Mgt	4
AB105 Organisation Behaviour and Design	4
AB112 Marketing	4
MT1202 Introduction to Maritime Industry	3
HW110 Effective Communication	2
AB106 Principles of Economics	4
AB107 Business Law	4
AB113 Information Technology	4
MT1101 Mathematics I for Maritime Studies	3
MT1201 Transport Liability and INCO Terms	3
MT1301 Maritime Technology I	3
Total AUs	42

Year 2 Semester 1	
Course code and title	AUs
AA102 Accounting II	4
BM211 International Business Environment	4
MT2101 Mathematics II for Maritime Studies	3
MT2201 Shipping Economics	3
MT3301 Maritime Technology II	3
MT2301 Statistics	3
Total AUs	20

Year 2 Semester 2	
Course code and title	AUs
AC208 Company Law	4
MT2204 Shipping Management	3
MT2205 Port Economics	3
MT2206 International Framework of Shipping	3
MT2302 Maritime Science I	3
HW210 Technical Communication	2
Total AUs	20

Year 3 Semester 1	
Course code and title	AUs
MT3203 Introduction to Marine Insurance	3
MT3202 Maritime Law	3
MT2202 Ship Accounting	3

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GER - PE 1	3
GER - PE 2	3
Total AUs	18

Year 3 Semester 2	
Course code and title	AUs
BC 206 Financial Analytics and Reporting	4
MT3201 Ship Chartering	3
MT3204 Quality Management in Shipping	3
MT3302 Maritime Science II	3
MT3303 Spatial Information Science	3
HW310 Professional Communication	2
MT3401 Industrial Immersion	5
Total AUs	23

Final Year Semesters 1 and 2	
Course code and title	AUs
MT4201 Shipping Logistics	3
MT4203 Shipping Strategy	3
MT4351 Inter-modal Transportation	3
MT4502 Human Resources Management and Entrepreneurship	3
MT4401 Research Project	5
GER - PE 3	3
BH331 Cultural Intelligence at Work	4
MT3502 Maritime Professionals and Society	3
MT4202 Essentials of Project Management	3
MT4352 Distribution and Warehousing	3
MT4353 Port Planning and Operations	3
MT4401 Research Project	5
Total AUs	41