

Semester 1 start - ODD year

PARTS A2 and A3 - Compulsory					Part B - Advanced BE (Hons) electives and Part C - ME electives																								
					Multidisciplinary		Research		Water and Environmental				Geotechnical			Structures				Transport			Fire						
Odd	Semester 1	ENGG7901 Professional engineering and business environment: Global practice	Elective	Elective	Elective	Semester 1	CIVL4250 Numerical methods in engineering	CIVL4340 Wind Engineering			CIVL4160 ^{oe} Advanced fluid mechanics ODD	CIVL4140 ^o Groundwater & surface flow modelling	CIVL4170 Environmental Risk Assessment and Management	CIVL4180 Sustainable built environment	CIVL7135 ^o Advanced engineering monitoring ODD	CIVL7131 Urban Hydrology	MINE4000 Mine waste management and landform design	CIVL4270 Geotechnical investigating and testing	CIVL7215 ^o Ground improvement and remediation technologies ODD	CIVL4333 Advanced concrete design		CIVL7350 Design of composite structures		CIVL4412 Travel behaviour and transport modelling		CIVL7425 ^o Transport models for planning ODD	FIRE3700 Introduction to fire safety engineering	FIRE4610 Fire engineering design: Solutions for implicit safety	FIRE7660 Structural fire engineering
Odd	Semester 2	ENGG7902 Engineering innovation and leadership	CIVL7505 Research methods for civil engineers	Elective	Elective	Semester 2	CIVL4522 Construction engineering management				CIVL4110 ^o Coastal and estuarine processes ODD					CIVL7170 Advanced sustainable built environment	CIVL4230 Advanced soil mechanics	CIVL4280 Advanced rock mechanics		CIVL4332 Advanced structural analysis	CIVL4334 Design of timber structures	CIVL7315 Advanced concrete structures and concrete technology	CIVL7360 Computational methods for optimization and advanced analysis	CIVL4450 Traffic Flow Theory and Emerging Technologies	CIVL4460 Highway geometric design	CIVL7435 ^o Traffic simulation ODD			FIRE7620 Fire dynamics
Even	Semester 1	CIVL7511 Research project	Elective	Elective	Elective	Semester 1	CIVL4250 Numerical methods in engineering	CIVL4340 Wind Engineering	CIVL7500 ^o Research thesis		CIVL4140 Groundwater & surface flow modelling	CIVL4170 Environmental Risk Assessment and Management	CIVL4180 Sustainable built environment	CIVL7155 ^o Environmental fluid mechanics modelling EVEN	CIVL7131 Urban Hydrology	MINE4000 Mine waste management and landform design	CIVL4270 Geotechnical investigating and testing	CIVL7225 ^o Dam and embankment engineering EVEN	CIVL4333 Advanced concrete design		CIVL7350 Design of composite structures		CIVL4412 Travel behaviour and transport modelling		CIVL7415 ^o Spatial and quant. methods for transport data analysis EVEN	FIRE3700 Introduction to fire safety engineering	FIRE4610 Fire engineering design: Solutions for implicit safety	FIRE7660 Structural fire engineering	
Even	Semester 2		Elective	Elective	Elective	Semester 2	CIVL4522 Construction engineering management					CIVL4120 ^o Adv. open channel flow and hydraulic structures EVEN				CIVL7170 Advanced sustainable built environment	CIVL4230 Advanced soil mechanics	CIVL4280 Advanced rock mechanics	CIVL7235 ^o Underground engineering EVEN	CIVL4332 Advanced structural analysis	CIVL4334 Design of timber structures	CIVL7315 Advanced concrete structures and concrete technology	CIVL7360 Computational methods for optimization and advanced analysis	CIVL4450 Traffic Flow Theory and Emerging Technologies	CIVL4460 Highway geometric design			FIRE7620 Fire dynamics	

Enrol in CIVL7511 in both semesters

Enrol in CIVL7500 in both semesters

Semester 1 start - EVEN year

PARTS A2 and A3 - Compulsory					Part B - Advanced BE (Hons) electives and Part C - ME electives																								
					Multidisciplinary		Research		Water and Environmental				Geotechnical			Structures				Transport			Fire						
Even	Semester 1	ENGG7901 Professional engineering and business environment: Global practice	Elective	Elective	Elective	Semester 1	CIVL4250 Numerical methods in engineering	CIVL4340 Wind Engineering			CIVL4140 Groundwater & surface flow modelling	CIVL4170 Environmental Risk Assessment and Management	CIVL4180 Sustainable built environment	CIVL7155 ^o Environmental fluid mechanics modelling EVEN	CIVL7131 Urban Hydrology	MINE4000 Mine waste management and landform design	CIVL4270 Geotechnical investigating and testing	CIVL7225 ^o Dam and embankment engineering EVEN	CIVL4333 Advanced concrete design		CIVL7350 Design of composite structures		CIVL4412 Travel behaviour and transport modelling		CIVL7415 ^o Spatial and quant. methods for transport data analysis EVEN	FIRE3700 Introduction to fire safety engineering	FIRE4610 Fire engineering design: Solutions for implicit safety	FIRE7660 Structural fire engineering	
Even	Semester 2	ENGG7902 Engineering innovation and leadership	CIVL7505 Research methods for civil engineers	Elective	Elective	Semester 2	CIVL4522 Construction engineering management				CIVL4120 ^o Adv. open channel flow and hydraulic structures EVEN				CIVL7170 Advanced sustainable built environment	CIVL4230 Advanced soil mechanics	CIVL4280 Advanced rock mechanics	CIVL7235 ^o Underground structures EVEN	CIVL4332 Advanced structural analysis	CIVL4334 Design of timber structures	CIVL7315 Advanced concrete structures and concrete technology	CIVL7360 Computational methods for optimization and advanced analysis	CIVL4450 Traffic Flow Theory and Emerging Technologies	CIVL4460 Highway geometric design			FIRE7620 Fire dynamics		
Odd	Semester 1	CIVL7511 Research project	Elective	Elective	Elective	Semester 1	CIVL4250 Numerical methods in engineering	CIVL4340 Wind Engineering	CIVL7500 ^o Research thesis		CIVL4160 ^{oe} Advanced fluid mechanics ODD	CIVL4140 ^o Groundwater & surface flow modelling	CIVL4170 Environmental Risk Assessment and Management	CIVL4180 Sustainable built environment	CIVL7135 ^o Advanced engineering monitoring ODD	CIVL7131 Urban Hydrology	MINE4000 Mine waste management and landform design	CIVL4270 Geotechnical investigating and testing	CIVL7215 ^o Ground improvement and remediation technologies ODD	CIVL4333 Advanced concrete design		CIVL7350 Design of composite structures		CIVL4412 Travel behaviour and transport modelling		CIVL7425 ^o Transport models for planning ODD	FIRE3700 Introduction to fire safety engineering	FIRE4610 Fire engineering design: Solutions for implicit safety	FIRE7660 Structural fire engineering
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Enrol in CIVL7511 in both semesters

Enrol in CIVL7500 in both semesters

o Course offered in ODD years only.
e Course offered in EVEN years only.
@ Some Part C electives are available only every second year. Students may need to do them in their 1st year.
& CIVL7500 (#8 units) may be taken in lieu of CIVL7511 and two electives.
CIVL4140 and CIVL4160 are not offered in 2019