

SEMESTER 1, 2021 – COURSE LIST – INFORMATION TECHNOLOGY

Course Code	Course Name	PR - Pre-Requisite EX - Exclusion	MTH	CHLL	BER	ODL	FLXB	FLXG	FLXK	NTC
ITECH1001	Communications in Technology	PR: Basic computing skills EX: ITECH5001	Y	Y	Y	Y				
ITECH1100	Understanding the Digital Revolution	PR: Nil EX: Nil	Y	Y	Y	Y				
ITECH1101	IT Problem Solving	PR: Nil EX: Nil	Y	Y	Y	Y				
ITECH1102	Networking and Security	PR: Nil EX: Nil	Y	Y	Y	Y				
ITECH1103	Big Data and Analytics	PR: Nil EX: Nil	Y			Y				
ITECH1400	Foundations of Programming	PR: Nil EX: ITECH1000 and ITECH5000	Y			Y				
ITECH2002	Systems Modelling	PR: ITECH1100 EX: ITECH2101	Y	Y	Y	Y				
ITECH2003	Web Design	PR:ITECH1100 EX: ITECH2106	Y	Y	Y	Y				
ITECH2301	Network Architecture and Design	PR: ITECH1102 EX: Nil	Y	Y		Y				
ITECH2303	Data Analytics	PR: ITECH1103 EX: Nil								
ITECH2304	Emerging Information Systems	PR: ITECH1100 EX: Nil	Y		Y	Y				
ITECH2306	Agile Coding	PR: ITECH2000 and ITECH2001 or ITECH1000 OR ITECH1400 EX: ITECH2100	Y	Y	Y	Y				
ITECH2308	Contemporary Mainframes	PR: ITECH1104 EX: Nil	Y			Y				
ITECH2311	Industry Experience 1	PR: At least 8 computing courses EX: Nil	Y			Y				
ITECH3001	User Experience 1	PR: ITECH1103 and ITECH2003 EX: Nil	Y	Y	Y	Y				

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ITECH3101	Business Analytics and Decision Support	PR: ITECH1103 EX: Nil	Y		Y	Y				
ITECH3105	Mainframe Systems and Services	PR: ITECH2308 EX: Nil	Y			Y				
ITECH3107	Mobile Device Programming	PR: ITECH2306 EX: ITECH3250	Y			Y				
ITECH3108	Dynamic Web Development	PR: ITECH2003 EX: ITECH3224	Y			Y				
ITECH3208	Project 1	PR: ITECH2002 or ITECH2101 or ITECH3201 & ITECH2250 or ITECH3213 EX: Nil	Y	Y	Y	Y				
ITECH3209	Project 2	PR: ITECH3208 EX: Nil	Y			Y				
ITECH3215	Information Security	PR: ITECH1002 or ITECH1102 EX: Nil	Y	Y		Y				
ITECH3222	Computer Games Design	PR: ITECH1004 or ITECH2001 EX: Nil	Y			Y				
ITECH5402	Enterprise Systems	PR: Nil EX: Nil	Y			Y				
ITECH5500	Professional Research and Communication	PR: ITECH11 EX: ITECH5401	Y							
ITECH7000	IT Professional Engagement	PR: Nil EX: Nil				Y				
ITECH7400	IT Service Management and Professional Culture	PR: ITECH1100 and at least 60 credit points from ITECH courses any level EX: ITECH7402	Y			Y				
ITECH7407	Real Time Analytics	PR: ITECH1006 or ITECH1103 EX: Nil	Y			Y				
ITECH7409	Software Testing	PR: ITECH1000 or ITECH1400 EX: Nil	Y			Y				

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ITECH7410	Software Engineering Methodologies	PR: ITECH1400 or ITECH1000 EX: Nil	Y			Y				
ITECH7413	Supply Chain Operations & Management	PR: ITECH1006 or ITECH1103 EX: Nil	Y			Y				
ITECH7415	Masters Project	PR: ITECH5500 and ITECH7401 EX: ITECH7403 and ITECH7404 and ITECH7405 and ITECH7602	Y			Y				

SEMESTER 1, 2021 COURSE LISTING – ENGINEERING

Course Code	Course Name	PR - Pre-Requisite EX - Exclusion	MTH	CHLL	BER	ODL	FLXB	FLXG	FLXK	NTC
ENGIN1001	Professional Engineering	PR: Nil EX: ENCOR1005	Y	Y		Y				
ENGIN1002	Engineering Physics	PR: Nil EX: ENCOR1021 and ENCOR2100	Y	Y		Y				
ENGIN1003	Materials in Engineering	PR: Nil EX: ENCOR1110	Y	Y		Y				
ENGIN2001	Professional Practice	PR: ENCOR1005 or ENGIN1001 EX: ENCOR3035	Y	Y						
ENGIN2201	Hydraulics and Hydrology	PR: ENCOR1021 or ENCOR2100 or ENGIN1002 EX: ENCIV2320	Y	Y						
ENGIN2202	Concrete Technology & Civil Construction	PR: ENCOR1110 or ENGIN1003 EX: ENCIV2020	Y	Y						
ENGIN2301	Mechanics of Solids	PR: ENCOR1000 or ENCOR1021 or ENGIN1005 EX: ENCOR2030	Y	Y						
ENGIN2302	Engineering Dynamics	PR: ENCOR1000 or ENCOR1021 or ENGIN1005 EX: ENMEC2001	Y							

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ENGIN2401	Analog and Digital Electronics	PR: ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2010		Y		Y				
ENGIN2402	Measurement and Computer Instrumentation	PR: ENCOR1000 or ENCOR1021 or ENGIN1002 EX: ENMTX2020 and ETMEC3260	Y	Y		Y				
ENGIN2501	Mine Power and Services Technology	PR: Nil EX: ENMIN5100 and ETMIN2260	Y			Y				
ENGIN2502	Rock Fragmentation	PR: Nil EX: ENMIN2040	Y			Y				
ENGIN3001	Engineering Research Methodology and Management	PR: ENCOR1005 or ENGIN1001 EX: ENCOR4010 and ENMTX4060				Y				
ENGIN3101	Power Electronics	PR: ENGIN1002 EX: Nil	Y							
ENGIN3102	Power System Analysis	PR: ENGIN2104 EX: Nil	Y							
ENGIN3201	Structural Design	PR: ENCIV2310 or ENGIN2203 EX: ENCIV3310	Y	Y						
ENGIN3202	Geotechnical Engineering	PR: ENCIV2330 or ENGIN2204 EX: ENCIV3330	Y	Y						
ENGIN3203	Traffic and Transport	PR: Nil EX: ENCIV3340	Y	Y						
ENGIN3204	Engineering Surveying	PR: Nil EX: ENCIV2010	Y	Y		Y				
ENGIN3301	Fluid Dynamics	PR: ENCOR2100 or ENGIN2304 EX: ENMEC3051	Y							
ENGIN3302	Introduction to Vibration Analysis	PR: ENGIN2302 or ENMEC2001 EX: ENMEC3120	Y							
ENGIN3303	Robotics	PR: ENGIN2302 or ENMEC2001 EX: ENMEC4160	Y							
ENGIN3401	Engineering Computer Applications and Interactive Modelling	PR: ENCOR1021 or ENGIN1006 EX: ENMTX3010 and ITECH1000		Y						

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ENGIN3402	Mechatronics Components Design	PR: ENCOR1010 or ENGIN1004 and ENGIN2303 or ENMEC2111 EX: ENMTX3020		Y		Y				
ENGIN3403	Sensors and Artificial Perception	PR: ENGIN2402 or ENMTX2020 or ETMEC3260 EX: ENMTX3060	Y	Y						
ENGIN3404	Systems Dynamics and Control	PR: MATHS3001 or MATHS3040 EX: ENMEC3500 and ENMTX3040	Y	Y		Y				
ENGIN3501	Underground Production Systems	PR: ENGIN2502 or ENMIN2040 EX: ENMIN3020	Y			Y				
ENGIN3502	Subsurface Environmental Engineering	PR: ENCOR2100 or ENGIN2304 EX: ENMIN3050 and ENMIN5023	Y			Y				
ENGIN4001	Engineering Project 1	PR: ENGIN3001 EX: ENCOR4100	Y	Y		Y				
ENGIN4002	Engineering Project 2	PR: ENCOR4100 or ENGIN4001 EX: ENCOR4200	Y							
ENGIN4301	Machine Dynamics and Vibration	PR: ENGIN3303 or ENMEC4160 EX: ENMEC4060				Y				
ENGIN4401	Industrial Robotic Systems	PR: ENGIN3406 or ENMTX4010 EX: ENMTX3070		Y						
ENGIN5002	Advanced Engineering Project 1	PR: ENGIN3001 or ENGIN5001 EX: ENCOR7020	Y							
ENGIN5003	Advanced Engineering Project 2	PR: ENGIN5002 EX: ENCOR7030				Y				
ENGIN5003	Advanced Engineering Project 2	PR: ENGIN5002 EX: ENCOR7030				Y				
ENGIN5201	Surface Water Hydrology	PR: ENGIN2201 EX: Nil				Y				

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ENGIN5205	Engineering Project Management Theory	PR: Nil EX: Nil	Y			Y				
ENGIN5206	Engineering Contracts and Procurement	PR: Nil EX: Nil	Y							
ENGIN5207	Data Analytics and Decision Making	PR: Nil EX: Nil	Y							
ENGIN5302	Modelling and Simulation	PR: MATHS3001 or MATHS3040 and ENGIN2301 EX: ENCOR4050				Y				
ENGIN5505	Mine Planning and Scheduling	PR: Nil EX: ENMIN4090 and ENMIN7010	Y			Y				
ENGIN5512	Underground Production Systems	PR: Nil EX: ENMIN5130	Y			Y				
MGGGC7105	Slope Stability	PR: Nil EX: Nil				Y				
MREGC5001	Terotechnology & Life Cycle Costs	PR: Nil EX: ENMTX4050				Y				
MREGC5002	Maintenance Management	PR: Nil EX: Nil				Y				
MREGC5003	Industrial Techniques in Maintenance Management	PR: Nil EX: Nil				Y				
MREGC5004	Asset Management Techniques	PR: Nil EX: Nil				Y				
MREGC5005	Quantitative Techniques for Asset Management	PR: Nil EX: MREGC5101				Y				
MREGC5008	Maintenance & Reliability Engineering Project	PR: At least 45 credit points from program GEM4 or GMR9 EX: Nil				Y				

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MREGC5101	Basic Quantitative Skills for Reliability Engineering	PR: Nil EX: MREGC5005				Y				
MREGC5102	Understanding Reliability	PR: Nil EX: Nil				Y				
MREGC5103	Advanced Reliability	PR: MREGC5005, MREGC5101, MREGC5102 EX: Nil				Y				
MREGC5104	Reliability Applications	PR: MREGC5101 or MREGC5102 or MREGC5103 EX: Nil				Y				

SEMESTER 1, 2021 COURSE LISTING – SCIENCE & MATHS

Course Code	Course Name	PR - Pre-Requisite EX - Exclusion	MTH	CHLL	BER	ODL	FLXB	FLXG	FLXK	NTC
MATHS1000	Upon the Shoulders of Giants	PR: VCE Mathematics or equivalent EX: ENCOR1015 and MATHS2000 and SCCOR1300	Y			Y				
MATHS1001	Modelling and Change (Intro Level)	PR: Nil EX: Nil	Y	Y		Y				
MATHS2003	Profit Loss and Gambling	PR: At least one introductory level maths course or equivalent EX: MATHS1003	Y	Y		Y				
MATHS2016	Modelling Continuous Change	PR: MATHS1001 EX: Nil	Y	Y		Y				
MATHS3002	Analytics Project 1	PR: MATHS2001 or STATS2101 EX: Nil	Y			Y				
MATHS3004	Modelling the environment	PR: MATHS2001 EX: Nil				Y				
MATHS3007	Puzzles Patterns and Proofs	PR: At least one intermediate level mathematics course EX: MATHS2005	Y			Y				
SCGEO1105	Earth's Living History	PR: Nil EX: Nil	Y			Y				
SCGEO2106	Hydrology	PR: ENCOR1015 or SCCOR1300 or MATHS1000 EX: Nil	Y			Y				
SCGEO2111	General Science: Landscape Evolution	PR: SCENV1502 or SCGEO1102 or SCGEO1106 EX: Nil	Y			Y				
SCGEO2112	Sedimentology and Stratigraphy	PR: SCGEO1102 or SCGEO1103 EX: SCGEO2104 and SCGEO3101 and SCGEO3105	Y							
SCGEO3102	Petrology	PR: SCGEO2102 EX: Nil	Y							

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SCGEO3103	Applied Geochemistry	PR: SCGEO1102 EX: Nil	Y			Y				
SCMET3100	Mineral Processing 1	PR: SCCHM1003 or SCMET1002 EX: Nil	Y			Y				
STATS1000	Statistical Methods	PR: Nil EX: SCIGC1020	Y	Y	Y	Y				
STATS2101	Statistics for Prediction	PR: STATS1000 EX: Nil	Y			Y				