

Faculty of Engineering, Built Environment and Information Technology
School of Engineering
Department of Chemical Engineering
Overview of Regulation changes in 2015 for 2016 and 2017

Changes have been made, or are in the process of being made to the curriculum in order to ensure a well-integrated curriculum. These changes have been communicated to all undergraduate groups in 2015 and are repeated below, for clarity.

First Year:

2015 vs 2016 modules						
2015 Yearbook			2016 Yearbook			
Year of Study: 1 Semester 1:			Year of Study: 1 Semester 1:			
Module	Credits	Prerequisites	Module	Credits	Prerequisites	Comments
CHM 171 General Chemistry 171	16		CHM 171 General chemistry 171	16		
CIR 113 Chemical Engineering 113	8		CIR 113 Chemical engineering 113	8		
FSK 116 Physics 116	16		FSK 116 Physics 116	16		
HAS 110 Humanities & Social Sciences 110	8		HAS 110 Humanities and social sciences 110	8		
MGC 110 Graphical Communication 110	16		MGC 110 Graphical communication 110	16		
WTW 158 Calculus 158	16		WTW 158 Calculus 158	16		
	80			80		
Year of Study: 1 Semester 2:			Year of Study: 1 Semester 2:			
CHM 181 General chemistry 181	16	CHM 171	CHM 181 General chemistry 181	16	CHM 171	
CIR 123 Chemical engineering 123	8	CHM 171GS, CIR 113	CIR 12 Chemical engineering 123	8	CHM 171GS, CIR 113	
EBN 122 Electricity and electronics 122	16		EBN 122 Electricity and electronics 122	16		
HAS 120 Humanities and social sciences 120	8		HAS 120 Humanities and social sciences 120	8		
SWK 122 Mechanics 122	16	WTW 158	SWK 122 Mechanics 122	16	WTW 158	
WTW 161 Linear algebra 161	8		WTW 164 Linear algebra and Calculus 164	16	WTW 158 GS	WTW 161 & 168 are joined from 2016.
WTW 168 Calculus 168	8	WTW 158 GS		80		

Second year:

2015 vs 2016 modules						
2015 Yearbook			2016 Yearbook			
Year of Study: 2 Semester 1:			Year of Study: 2 Semester 1:			
Module	Credits	Prerequisites	Module	Credits	Prerequisites	Comments
CHM 215 Chemistry 215	12	CHM 171/172, 181	CHM 215 Chemistry 215	12	CHM 171/172, 181	
CIR 211 Chemical engineering 211	12	CIR 123	CIR 211 Chemical engineering 211	12	CIR 123	
CIM 210 Chemical engineering materials 210	8	CHM 171/172, CIR310#	CIM 210 Chemical engineering materials 210	8	CHM 181	
JCP 203 Community-based project 203	8		JCP 203 Community-based project 203	8		
MPR 213 Programming and information technology 213	18		MPR 213 Programming and information technology 213	18		Credits will be reduced from 18 to 16 in 2017
SWK 210 Strength of materials 210	16	SWK122, WTW168/WTW128	SWK 210 Strength of materials 210	16	SWK122, WTW168/WTW128	
WTW 256 Differential equations 256	8	WTW 158, WTW 161,168	WTW 25 Differential equations 256	8	WTW 158, WTW 161,168	
WTW 258 Calculus 258	8	WTW 158,168	WTW 258 Calculus 258	8	WTW 158,168	
	90			90		
Year of Study: 2 Semester 2:			Year of Study: 2 Semester 2:			
BES 220 Engineering statistics 220	8		BES 220 Engineering statistics 220	8		
CHM 226 Chemistry 226	8	CHM 171/172, 181	CHM 226 Chemistry 226	8	CHM 171/172, 181	
CTD 223 Thermodynamics 223	16	CIR 211, MPR 212/213 (WTW 258)	CTD 223 Thermodynamics 223	16	CIR 211, MPR 212/213 (WTW 258)	
EIR 221 Electrical engineering 221	16	EBN 111/122, WTW 161	EIR 221 Electrical engineering 221	16	EBN 111/122, WTW 161	
WTW 238 Mathematics 238	16	WTW 258 GS, 256	WTW 238 Mathematics 238	16	WTW 258 GS, 256	
WTW 263 Numerical methods 263	8	WTW 161,168	WTW 263 Numerical methods 263	8	WTW 161,168	
	72			72		

Third year:

2015 Yearbook			2015 vs 2016 modules			
Year of Study: 3 Semester 1:			2016 Yearbook			
Module	Credits	Prerequisites	Module	Credits	Prerequisites	Comments
BSS 310 Engineering management 310	8		BSS 310 Engineering management 310	8		
CIR 310 Chemical engineering 310	8	(CTD 223), SWK 210, CHM 215, CIM 210#	CIR 310 Chemical engineering 310	8	(CTD 223), SWK 210 , CHM 215	SWK210 as pre-requisite to be moved to CIO320 from 2017 (Notes (i) & (ii) below)
CJJ 310 Professional and technical communication 310	8	CIR 123	CJJ 310 Professional and technical communication 310	8	CIR 123	See Note (iii) below
CMO 310 Mass transfer 310	16	(CTD 223), COP 311#	CMO 310 Mass transfer 310	16	(CTD 223), COP 311#	
COP 311 Transfer processes 311	16	WTW 238, (WTW 263)	COP 311 Transfer processes 311	16	WTW 238, (WTW 263)	
CPA 310 Particle technology 310	16	(CIR 211), COP 311#	See Notes (iv) & (v) below CPA 310 and CBI 410 swap in 2016			All who have not completed CPA 310, must register for CPA 410 in 2017
			CBI 310 Biotechnology 310	16	(CIR 211), (CHM 215)	
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Year of Study: 3 Semester 2:			Year of Study: 3 Semester 2:			
CIO 320 Chemical engineering design 320	16	(CTD 223), (COP 311)	CIO 320 Chemical engineering design 320	16	(CTD 223), (COP 311)	Pre-requisites from 2017: (CTD 223), (COP 311), SWK210
CKN 321 Kinetics 321	16	(CTD 223)	CKN 321 Kinetics 321	16	(CTD 223)	
CLB 321 Laboratory 321	16	CJJ 210, CHM 226, CPN 321#, CKN 321#, (CMO 320/310), CIO 310/320#	CLB 321 Laboratory 321	16	CJJ 210, CHM 226, CPN 321#, CKN 321#, (CMO 320/310), CIO 310/320#	
CPN 321 Process dynamics 321	16	CIO 310/320#, CKN 321#	CPN 321 Process dynamics 321	16	CIO 310/320#, CKN 321#	
MIA 320 Engineering activity and group work 320	8		MIA 320 Engineering activity and group work 320	8		Pre-requisites from 2017: (CJJ 310), (BSS 310)
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CPY 311 Practical Training	16	(JSQ 216/CJJ210), (CIR 211)	(CIR 211)			

Fourth Year:

2015 Yearbook			2015 vs 2016 modules			
Year of Study: 4 Semester 1:			2016 Yearbook			
Module	Credits	Prerequisites	Module	Credits	Prerequisites	Comments
CBI 410 Biotechnology 410	16	(CKN 321), (CMO 320/310), (CPA 310)	See Notes (iv) & (v) below CPA 310 and CBI 410 swap in 2016			All who have not passed CBI 410, must register for CBI 310 in 2016
			CPA 410 Particle Technology 410	16	(COP 311)	All who have not passed CPA 310, must register for CPA 410 in 2017.
CPB 410 Process control 410	16	CPN 321 GS	CPB 410 Process control 410	16	CPN 321 GS	
CPS 410 Process synthesis 410	8	CLB 321, CIR 310 GS	CPS 410 Process synthesis 410	8	CLB 321, CIR 310 GS	
CRO 410 Reactor design 410	16	CKN 321 GS	CRO 410 Reactor design 410	16	CKN 321 GS	
CSC 411 Research project 411	16	CLB 321, CPB 410#, CRO 410#	CSC 411 Research project 411	16	CLB 321, CPB 410#, CRO 410#	
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Year of Study: 4 Semester 2:			Year of Study: 4 Semester 2:			
CPJ 421 Design project 421	24	(CPB 410), (CRO 410), BIE 310/BSS 310, CPS 420#, CPR 420#	CPJ 421 Design project 421	24	(CPB 410), (CRO 410), BIE 310/BSS 310, CPS 420#, CPR 420#	From 2017 CIO 320 will be added to the pre-requisites for CPJ 421
CPR 420 Chemical engineering practice 420	8	CLB 321	CPR 420 Chemical engineering practice 420	8	CLB 321	
CPS 420 Process analysis 420	8	CPS 410	CPS 420 Process analysis 420	8	CPS 410	
CSC 421 Research project 421	16	CSC 411	CSC 421 Research project 421	16	CSC 411	
CSS 420 Specialisation 420	16	CPJ 421#	CSS 420 Specialisation 420	16	CPJ 421#	
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Notes:

It remains the responsibility of the student to ensure that he/she accumulates sufficient credits to pass any academic year and to register for the relevant prescribed modules.

- (i) Students who have not completed CIR 310 prior to 2015 will have to register for and successfully complete CIM 210 as well as the restructured CIR 310.
- (ii) As a transitional measure in 2016 the following will be applicable:
Students who have not completed CIR310 and have to repeat SWK 210 in 2016, will be allowed to register for CIR 310 in 2016, since the SWK 210 pass pre-requisite becomes a pre-requisite for CIO 320 in 2017.
- (iii) Students who have not completed CJJ 210 prior to 2015, will have to successfully complete CJJ 310.
- (iv) All students who have not completed CBI 410 in 2015 or earlier, have to register for CBI 310 in 2016
- (v) All students who have not completed CPA 310 in 2015 or earlier, must register for CPA 410 in 2017. **This module will not be presented in 2016.**

Rev: 2015-11-30