

Semester plan for students with study start in August

7th semester	Specialisation, Electives & BA	ELECTIVE 5 ECTS	MDM1	BPR2			
			SWA1	BPR2			
			EOS1	BPR2			
			5 ECTS	20 ECTS			
6th semester	Specialisation, Electives & BA	PCL1 5 ECTS	BPR1 5 ECTS	ELECTIVE 5 ECTS	ELECTIVE 5 ECTS	ELECTIVE 5 ECTS	BUI1
							DIM1
							HWP1
							5 ECTS
5th semester	Internship	INP1 30 ECTS					
4th semester	Specialisation	SDJ3 5 ECTS	DNP1 5 ECTS	ESB1 5 ECTS	DWH1	DES1	SEP4D
					SGM1		SEP4C
					RIE1		SEP4E
					5/10 ECTS		5 ECTS
3rd semester	Specialisation	CAL1 10 ECTS		ADS1 5 ECTS	ERP1	DBS2	INO1 5 ECTS
					AND1		
					ELE1		
					5/10 ECTS		
2nd semester	Client Server System	AJP1 5 ECTS	CON1 5 ECTS	DBS1 5 ECTS	SDJ2 10 ECTS		SEP2 5 ECTS
1st semester	Basic System Construction	CSE1 5 ECTS	LRL1 5 ECTS	RWD1 5 ECTS	SDJ1 10 ECTS		SEP1 5 ECTS

Semester plan for students with study start in February

7th semester	Specialisation, Electives & BA	ELECTIVE 5 ECTS	BUI1	BPR2			
			DIM1	BPR2			
			HWP1	BPR2			
			5 ECTS	20 ECTS			
6th semester	Specialisation, Electives & BA	PCL1 5 ECTS	BPR1 5 ECTS	ELECTIVE 5 ECTS	ELECTIVE 5 ECTS	ELECTIVE 5 ECTS	MDM1
							SWA1
							EOS1
							5 ECTS
5th semester	Internship	INP1 30 ECTS					
4th semester	Specialisation	SDJ3 5 ECTS	DNP1 5 ECTS	ESB1 5 ECTS	ERP1	DBS2	SEP4D
					AND1		SEP4C
					ELE1		SEP4E
					5/10 ECTS		5 ECTS
3rd semester	Specialisation	CAL1 10 ECTS	ADS1 5 ECTS	DWH1	DES1	INO1 5 ECTS	
				SGM1			
				RIE1			
				5/10 ECTS			
2nd semester	Client Server System	AJP1 5 ECTS	CON1 5 ECTS	DBS1 5 ECTS	SDJ2 10 ECTS		SEP2 5 ECTS
1st semester	Basic System Construction	CSE1 5 ECTS	LRL1 5 ECTS	RWD1 5 ECTS	SDJ1 10 ECTS		SEP1 5 ECTS

Appendix 2 – Course prerequisites

All courses mentioned under “Prerequisites” refer to courses offered by the ICT programme, VIA University College. Courses with similar content offered at other institutions may be accepted upon request.

Course Code	Semester	Specialisation	ECTS	Prerequisites
CSE1	1st	All	5	
LRL1	1st	All	5	
RWD1	1st	All	5	
SDJ1	1st	All	10	
SEP1	1st	All	5	
AJP1	2nd	All	5	SDJ1
CON1	2nd	All	5	SDJ1
DBS1	2nd	All	5	SDJ1
SDJ2	2nd	All	10	SDJ1
SEP2	2nd	All	5	
CAL1	3rd	All	10	SDJ2
ADS1	3rd	All	5	SDJ2
INO1	3rd	All	5	
ELE1	3rd/4th	EE	10	
DBS2	3rd/4th	DE	5	DBS1
ERP1	3rd/4th	DE	5	SDJ1, DBS1
AND1	3rd/4th	CM	10	SDJ1
SDJ3	4th	All	5	SDJ2
DNP1	4th	All	5	SDJ1
ESB1	4th	All	5	
RIE1	4th/3rd	EE	10	LRL1, AJP1
DES1	4th/3rd	DE	5	
DWH1	4th/3rd	DE	5	DBS1, SDJ2
SGM1	4th/3rd	CM	10	
SEP4	4th	DE/CM/EE	5	SEP2
PCL1	6th	All	5	SDJ1, SDJ2, SDJ3
BPR1	6th	All	5	
HWP1	6th/7th	EE	5	LRL1, SDJ2, CAL1
BUI1	6th/7th	DE	5	DBS1, SDJ2
DIM1	6th/7th	CM	5	
SWA1	7th/6th	CM	5	RWD1
MDM1	7th/6th	DE	5	DBS1, SDJ2
EOS1	7th/6th	EE	5	LRL1, CAL1
BPR2	7th	DE/CM/EE	20	BPR1

Appendix 3 – Compulsory courses (all specialisations)

Course Name	ECTS	Code	Int./Ext.	Assessment	Semester*
Communication Skills for Engineers	5	CSE1	Int.	Pass/not Passed	1st
Lego Robot Lab	5	LRL1	Int.	Oral	1st
Responsive Web Design	5	RWD1	Int.	Oral	1st
Software Development with UML and Java	10	SDJ1	Ext.	Oral	1st
Semester Project: Single User Systems	5	SEP1	Int.	Oral + report	1st
Applied Java Programming	5	AJP1	Int.	Written	2nd
Computer Networking	5	CON1	Int.	Oral	2nd
Database Systems	5	DBS1	Int.	Oral	2nd
Software Development with UML and Java 2	10	SDJ2	Ext.	Oral	2nd
Semester Project: Client/Server System	5	SEP2	Int.	Oral + report	2nd
Electronics	10	ELE1	Int.	Oral	3rd/4th
Computer Architecture Lab	10	CAL1	Ext.	Written	3rd
Algorithms and Advanced Data Structures	5	ADS1	Ext.	Oral	3rd
Engineering Innovation	5	INO1	Int.	Pass/not Passed	3rd
Database Internals and Tuning	5	DBS2	Int.	Oral	3rd/4th
ERP Systems Programming	5	ERP1	Ext.	Oral	3rd/4th
Android Development	10	AND1	Ext.	Oral	3rd/4th
Software Development of Distributed Systems	5	SDJ3	Ext.	Oral	4th
Internet Technologies, C# and .Net	5	DNP1	Int.	Oral	4th
Engineering Science and Business	5	ESB1	Int.	Pass/not Passed	4th
Real-Time Programming, Interfacing and Electronics	10	RIE1	Ext.	Oral	4th/3rd
Data Encryption and Security	5	DES1	Int.	Oral	4th/3th
Data Warehousing	5	DWH1	Ext.	Oral	4th/3rd
Serious Games	10	SGM1	Int.	Oral	4th/3rd
Semester Project 4	5	SEP4	Int.	Oral + report	4th

*In courses where two semesters are stated, the first entry refers to students enrolled in August and the second entry refers to students enrolled in February.

Internship	30	INP1	Int.	Pass/not passed	5th
Bachelor Project Preparation	5	BPR1	Int.	Pass/not passed	6th
Programming Concept and Languages	5	PCL	Ext.	Written	6th
Embedded Operating Systems	5	EOS1	Int.	Oral	7th/6th
Single-page Web Applications	5	SWA1	Int.	Oral	7th/6th
Master Data Management and Data Mining	5	MDM1	Int.	Oral	7th/6th
Business Intelligence	5	BUI1	Int.	Oral	6th/7th
Digital Multi Media	5	DIM1	Int.	Oral	6th/7th
Hardware Oriented programming	5	HWP1	Int.	Oral	6th/7th
Bachelor Project	20	BPR2	Ext.	Oral + report	7th

Appendix 4 – Elective courses

Course Name	ECTS	Code	Semester
Advanced .NET Programming	5	DNP2	Autumn
Applied Linear Algebra	5	ALI1	Spring
Business Intelligence	5	BUI1	Spring
Compiler Construction	5	CMC1	Autumn
Data Encryption and Security	5	DES1	Spring
Data Warehousing	5	DWH1	Spring
Database Internals and Tuning	5	DBS2	Autumn
Digital Multi Media	5	DIM1	Spring
Digital Signal Processing	5	DSP1	Spring
Electronics	10	ELE1	Autumn
Embedded Operating Systems	5	EOS1	Autumn
ERP Systems Programming	5	ERP1	Autumn
FPGA Programming with VHDL and Simulation	5	FPG1	Autumn
Hardware Oriented programming	5	HWP1	Spring
Interaction Design	5	IDX1	Spring
Linux Server Administration and Open Source	5	LOS1	Autumn
Master Data Management and Data Mining	5	MDM1	Autumn
Mixed Realities	5	MIX1	Spring
Mobile Development	5	MOB1	Spring
No-SQL versus relational databases	5	NSQ1	Spring
Process Management for ICT Engineering	5	PME1	Spring
Real-Time Programming, Interfacing and Electronics	10	RIE1	Spring
Smart Grid	5	SMG1	Autumn
Stochastic Modeling and Processing	5	SMP1	Autumn
Test and Software Quality	5	TST1	Spring