Communications, Transport and Infrastructure, M Sc in Engineering

300 credits

Civilingenjör i kommunikation, transport och samhälle

6CKTS

Valid from: 2016 Spring semester

Determined by
Board of Studies for Industrial Engineering and Logistics

Date determined
2016-01-19

Entry requirements

Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

Curriculum

Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIE53	Industrial Economics	6	G1X	1	C
TNA003	Calculus I	6	G1X	2	C
TNA005	Applied Mathematics in Science and Technology	6*	G1X	4	C
Period 2					
TNA004	Calculus II	6	G1X	2	C
TNA005	Applied Mathematics in Science and Technology	6*	G1X	4	C
TNK040	Telecommunication Systems	6	G1N	1	C

Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNA006	Calculus III	6	G1X	3	C
TNE043	Mechanics and Wave Physics	6	G2X	1	C
TNG018	Introduction to Logistics and Cost-Benefit Analysis	6*	G2X	2	C
Period 2					
TNG018	Introduction to Logistics and Cost-Benefit Analysis	6*	G2X	3	C
TNK049	Optimization	6	G2X	2	C
TNK113	Transport Economics	6	G2X	1	C

Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TND002	Object-Oriented Programming	6	G1X	1	C
TNG032	Applied Transform Theory	6	G2X	4	C
TNK061	Traffic Infrastructure	6*	G2X	2	C
Period 2					
TNG006	Statistics	6	G2X	1	C
TNG015	Signals and Systems	6	G2X	3	C
TNK061	Traffic Infrastructure	6*	G2X	2	C
TPTE06	Industrial Placement	6	G1X	-	V

Semester 5 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNG028	Automatic Control	6	G2X	2	C
TNK047	Optimization and System Analysis	6*	G2X	4	C
TNK090	Queueing Theory	6	G2X	1	C
Period 2					
TNG022	Modelling and Simulation	6	G2X	1	C
TNK047	Optimization and System Analysis	6*	G2X	4	C
TNK108	Computer Networking	6	G2X	3	C

Semester 6 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNG041	Scientific Methodology, Criticism of the Sources and Report Writing	2	G2X	4	C
TNK089	Discrete-Event Simulation	6	G2X	2	C
TNK093	Mobile Communication	6*	G2X	1	C
TNK111	Communication and Transportation - project	16*	G2X	3	C
Period 2					
TNK093	Mobile Communication	6*	G2X	4	C
TNK111	Communication and Transportation - project	16*	G2X	1	C

Semester 7 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO87	Project Management	6*	G2X	1	C
TNK106	Positioning Systems	6	A1X	2	C
TGTU01	Technology and Ethics	6	G1X	4	E
THEN09	Advanced English	6*	G2X	4	E
TNK051	Planning of Air Traffic	6	A1X	3	E
TNK091	Traffic Safety Management	6	A1X	3	E
TNK104	Applied Optimization I	6	A1X	4	E
Period 2					
TDDC28	Applications of Discrete-Event Simulation	6	A1X	3	C
TEIO87	Project Management	6*	G2X	1	C
TEAE11	Intellectual Property Rights	6	G1X	2	E
THEN09	Advanced English	6*	G2X	4	E
TMQU08	Quality and Business Development	6	G2X	2	E
TNG033	Programming in C++	6	G2X	3	E
TNK091	Traffic Safety Management	6	A1X	2	E
TNK105	Applied Optimization II	6	A1X	3	E

Semester 8 (Spring 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO05	Basic Entrepreneurship and Idea Feasibility Analysis	6*	G2F	2	E
TNK099	Logistics Networks and Transports	6	A1X	3	E
TNK115	Smart Cities	6	A1X	4	E
TNK118	Transport Demand Forecasting	6	A1X	2	E
TNK121	Communication Network Analysis	6	A1X	1	E
TNKA10	Rethoric in Speech, Texts and Images	6*	G1F	1	E
Period 2					
TEIO05	Basic Entrepreneurship and Idea Feasibility Analysis	6*	G2F	3	E
TNG016	Engineering Applications Using Matlab	6	A1X	4	E
TNK100	Logistics Resource Planning	6	A1X	3	E
TNK116	Internet of Things	6	A1X	1	E
TNK119	Traffic Theory and Simulation	6	A1X	2	E
TNKA10	Rethoric in Speech, Texts and Images	6*	G1F	1	E

Specialisation: Master Profile Smart Cities

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK115	Smart Cities	6	A1X	4	C
Period 2					
TNK116	Internet of Things	6	A1X	1	C

Specialisation: Master Profile Supply Chain Planning

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK099	Logistics Networks and Transports	6	A1X	3	C
Period 2					
TNK100	Logistics Resource Planning	6	A1X	3	C

Specialisation: Master Profile Traffic Analysis

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK118	Transport Demand Forecasting	6	A1X	2	C
Period 2					
TNK119	Traffic Theory and Simulation	6	A1X	2	C

Semester 9 (Autumn 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK051	Planning of Air Traffic	6	A1X	3	E
TNK114	Logistics in Supply Chains	6	A1N	2	E
TNK117	Data Analytics for Smart Cities	6	A1X	3	E
TNK120	Traffic State Estimation, Prediction and Control	6	A1N	1	E
Period 2					
TNK103	Analysis of Communication and Transport Systems	6	A1X	1	C
TNK098	Planning of Public Transportation and Railway Traffic	6	A1X	4	E
TNK105	Applied Optimization II	6	A1X	2	E
TNSL15	Logistics and Sustainable Development	6	G2X	3	E

Specialisation: Master Profile Smart Cities

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK117	Data Analytics for Smart Cities	6	A1X	3	C
Period 2					
TNK103	Analysis of Communication and Transport Systems	6	A1X	1	C

Specialisation: Master Profile Supply Chain Planning

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK114	Logistics in Supply Chains	6	A1N	2	C
Period 2					
TNK103	Analysis of Communication and Transport Systems	6	A1X	1	C

Specialisation: Master Profile Traffic Analysis

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TNK120	Traffic State Estimation, Prediction and Control	6	A1N	1	C
Period 2					
TNK103	Analysis of Communication and Transport Systems	6	A1X	1	C

Semester 10 (Spring 2021)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory /Voluntary
*The course is divided into several semesters and/or periods