

List of Courses for Exchange student

2nd semester/2017 (January 2018 - June 2018)

Please note that:

1. The numbers of credits (e.g., 3(3-0-6)) represent the credits, lecture hours, laboratory/practice hours, and self study hours per week.

2. Incoming exchange students will be classified according to their academic year:

- B1:** Bachelor Degree (1st Year)
B2-B4: Bachelor Degree (2nd Year to 4th Year)
M: Masters Degree
D: Doctoral Degree

Basic Courses (General, Math, Sciences)

No	Code	Course Name	Credits	B1	B2-B4	M-D
1	GTS111	Mathematical Analysis for Management Science	3 (3-0-6)	✓		
2	GTS112	Linear Algebra	3 (3-0-6)	✓		
3	GTS116	Mathematics for Technologists I	3 (3-0-6)	✓		
4	GTS117	Mathematics for Technologists II	3 (3-0-6)	✓		
5	GTS121	General Science I	3 (3-0-6)	✓		
6	GTS122	General Science II	3 (3-0-6)	✓		
7	GTS202	English Language Structures	3 (3-0-6)	✓	✓	✓
8	GTS213	Calculus for Technologists II	3 (3-0-6)	✓		
9	GTS231	Law and Technology	3 (3-0-6)	✓	✓	✓
10	GTS302	Technical Writing	2 (2-1-3)	✓	✓	✓
11	GTS303	Communications in Business	2 (2-1-3)	✓	✓	✓
12	MAS116	Mathematics I	3 (3-0-6)	✓		
13	MAS117	Mathematics II	3 (3-0-6)	✓		
14	SCS126	Chemistry for Engineers	3 (3-0-6)	✓		
15	SCS138	Applied Physics I	3 (3-0-6)	✓		
16	SCS139	Applied Physics II	3 (3-0-6)	✓		
17	TU110	Integrated Humanities	2 (2-0-4)	✓	✓	✓
18	TU120	Integrated Social Sciences	2 (2-0-4)	✓	✓	✓
19	TU140	Thai Studies	3 (3-0-6)	✓	✓	✓
20	EC210	Introductory Economics	3 (3-0-6)	✓	✓	✓
21	EL171	English Course II	3 (3-0-6)	Students from countries listed in the attachment are excluded from enrolling in EL171, EL172, and EL210		
22	EL172	English Course III	3 (3-0-6)			

Chemical Engineering (ChE) Program

No	Code	Course Name	Credits	B2-B4	M-D	Remark
1	CHS 212	Physical Chemistry	3 (3-0-6)	✓	✓	
2	CHS 213	Applied Mathematics in ChE	3 (3-0-6)	✓	✓	
3	CHS 242	Thermodynamics I	3 (3-0-6)	✓	✓	
4	CHS 251	Fluid Dynamics	3 (3-0-6)	✓	✓	
5	CHS 317	Safety in Chemical Operations	3 (3-0-6)	✓	✓	
6	CHS 353	Mass Transfer	3 (3-0-6)	✓	✓	
7	CHS 355	ChE Process Design	3 (3-0-6)	✓	✓	
8	CHS 364	Experimental Design and Methods for ChE	3 (3-0-6)	✓	✓	
9	CHS 328	Pharmaceutical Industry and Technology	3(3-0-6)	✓	✓	
10	CHS 374	Polymer Science and Engineering	3(3-0-6)	✓	✓	
11	CHS 425	General Food Science (Free Elective)	3 (3-0-6)	✓	✓	
12	CHS 371	Petroleum and Petrochemical Technology	3 (3-0-6)	✓	✓	

Civil Engineering (CE) Program

No	Code	Course Name	Credits	B2-B4	M-D	Remark
1	CES 202	Introduction to Building Facilities	3(3-0-6)	✓	✓	
2	CES 302	Engineering Hydrology	3(3-0-6)	✓	✓	
3	CES 312	Structural Analysis	3(3-0-6)	✓	✓	
4	CES 322	Reinforced Concrete Design (Lecture)	4(3-3-6)	✓	✓	
5	CES 332	Foundation Engineering	3(3-0-6)	✓	✓	
6	CES 343	Highway Engineering	3(3-0-6)	✓	✓	
7	CES 352	Material Testing	1(0-3-0)	✓	✓	
8	CES 426	Durability of Concrete Structures	3(3-0-6)	✓	✓	
9	CES 444	Hydraulic Engineering	3(3-0-6)	✓	✓	
10	CES 406	Special Studies in Civil Engineering II	3(3-0-6)	✓	✓	
11	CES 450	Urban Engineering	3(3-0-6)	✓	✓	
12	CES 371	Mechanics of Solids I	3(3-0-6)	✓	✓	
13	CES 405	Special Studies in Civil Engineering I	3(3-0-6)	✓	✓	

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Industrial Engineering (IE) Program

No.	Code	Course Name	Credits	B2-B4	M-D	Remark
1	IES 341	Engineering Economy	3(3-0-6)	✓	-	
2	IES 313	Industrial Plant Design	3(3-0-6)	✓	-	
3	IES 364	Manufacturing Processes Technologies	3(3-0-6)	✓	✓	
4	IES 353	Pollution Control and Waste Treatment	3(3-0-6)	✓	✓	
5	IES 374	Management Information Systems	3(3-0-6)	✓	✓	
6	IES 376	Logistics & Supply Chain Management	3(3-0-6)	✓	-	If there is available seat.
7	IES 342	Industrial Cost Analysis and Control	3(3-0-6)	✓	✓	
8	IES 371	Engineering Management	3(3-0-6)	✓	✓	

Mechanical Engineering (ME) Program

No.	Code	Course Name	Credits	B2-B4	M-D	Remark
1	MES 231	Engineering Mechanics	3(3-1-5)	✓	✓	
2	MES 302	Introduction to Computer Aided Design	2(1-3-2)	✓	✓	
3	MES 310	Thermodynamics	3(3-1-5)	✓	✓	
4	MES 312	Combustion and Emission Control	3(3-0-6)	✓	✓	
5	MES 313	Internal Combustion Engines	3(3-0-6)	✓	✓	
6	MES 321	Heat Transfer	3(3-0-6)	✓	✓	
7	MES 331	Solid Mechanics I	3(3-1-5)	✓	-	
8	MES 341	Fluid Dynamics	3(3-1-5)	✓	✓	
9	MES 351	Engineering Dynamics	3(3-1-5)	✓	-	
10	MES 333	Design of Machine Elements	3(3-0-6)	✓	✓	
11	MES 371	Material Science for Engineers	3(3-1-5)	✓	✓	
12	MES 382	Vibration and Noise Control	3(3-0-6)	✓	✓	
13	MES 483	Dynamic System and Control	3(3-0-6)	✓	-	
14	MES 494	Special Topic I in ME (Steam Boiler Technology)	3(3-0-6)	✓	✓	

Electronics and Communication Engineering (EC) program

No.	Code	Course Name	Credits	B2-B4	M-D	Remark
1	ECS 203	Basic Electrical Engineering	3 (3-0-6)	✓	-	
2	ECS 231	Electronic Circuits I	3 (3-0-6)	✓	-	
3	ECS 233	Electromagnetics	3 (3-0-6)	✓	-	
4	ECS 261	Elec. Measurement & Instrumentation	3 (3-0-6)	✓	-	
5	ECS 281	Signals and Systems	3 (3-0-6)	✓	-	
6	ECS 306	Basic EM and Power System	3 (3-0-6)	✓	-	
7	ECS 308	Basic Electromechanical Energy Conversion	3 (3-0-6)	✓	-	
8	ECS 371	Digital Circuits	3 (3-0-6)	✓	-	
9	ECS 382	Microprocessors	3 (3-0-6)	✓	-	
10	ECS 452	Digital Communication	3 (3-0-6)	✓	✓	This course may be not offered in the 2nd semester/2017.
11	ECS 455	Mobile Communication	3 (3-0-6)	✓	✓	
12	ECS 462	Antennas	3 (3-0-6)	✓	✓	
13	ECS 472	Digital Signal Processing	3 (3-0-6)	✓	✓	
14	ECS 475	Digital Image Processing	3 (3-0-6)	✓	✓	This course may be not offered in the 2nd semester/2017.

Information and Technology (IT) Program

No.	Code	Course Title	Credits	B2-B4	M-D	Remark
1	ITS 227	Algorithm Design	3 (3-0-6)	✓	-	
2	ITS 229	Human Computer Interface Design	3 (3-0-6)	✓	✓	
3	ITS 327	Computer Network Architectures and Protocols	3 (3-0-6)	✓	-	
4	ITS 329	System Analysis and Design	3 (3-0-6)	✓	✓	
5	ITS 335	IT Security	3 (3-0-6)	✓	-	
6	ITS 336	Artificial Intelligence	3 (3-0-6)	✓	-	
7	ITS 413	Internet Technologies and Applications	3 (3-0-6)	✓	✓	
8	ITS 423	Data Warehouses and Data Mining	3 (3-0-6)	✓	✓	
9	CSS 431	Machine Learning and Pattern Recognition	3 (3-0-6)	✓	✓	
10	CSS 432	Information Retrieval	3 (3-0-6)	✓	✓	

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Computer Engineering (CPE) program

No.	Code	Course Title	Credits	B2-B4	M-D	Remark
1	CSS 221	Computer Graphics and Applications	3 (2-3-4)	✓	-	
2	CSS 225	Operating System	3 (3-0-6)	✓	-	
3	CSS 334	Computer Networks and Internetworking	3 (3-0-6)	✓	-	
4	CSS 333	Parallel and Distributed Computing	3 (3-0-6)	✓	✓	
5	CSS 431	Machine Learning and Pattern Recognition	3 (3-0-6)	✓	✓	
6	CSS 432	Information Retrieval	3 (3-0-6)	✓	✓	
7	CSS 441	Security and Cryptography	3 (3-0-6)	✓	✓	
8	CSS 443	Real-time and Embedded Systems	3 (3-0-6)	✓	✓	

Engineering Management (EM) program

No	Code	Course Name	Credits	B2-B4	M-D	Remark
1	MTS 212	Principles of Management	3(3-0-6)	✓	-	For non-business student
2	MTS 231	Statistical Methods for Managers	3(3-0-6)	✓	-	
3	MTS 251	Economics for Business and Management	3(3-0-6)	✓	-	
4	MTS 254	Introduction to Management	3(3-0-6)	✓	-	
5	MTS 312	Principles of Marketing	3(3-0-6)	✓	-	For non-business student
6	MTS 331	Economics Decision Analysis	3(3-0-6)	✓	-	
7	MTS 332	Quality Management	3(3-0-6)	✓	-	
8	MTS 333	Production and Inventory Management	3(3-0-6)	✓	-	
9	MTS 394	Introduction to Research Methodology in MT	3(3-0-6)	✓	✓	
10	MTS 411	Management Accounting	3(3-0-6)	✓	-	
11	MTS 451	Project Management	3(3-0-6)	✓	✓	

Management Technology (MT) program

No.	Code	Course Name	Credits	B2-B4	M-D	Remark
1	MTS 212	Principles of Management	3(3-0-6)	✓	✓	For non-business student
2	MTS 233	Introduction to Supply Chain Management	3(3-0-6)	✓	✓	For non-business student
3	MTS 251	Economics for Business and Management	3(3-0-6)	✓	-	
4	MTS 311	Fundamental Financial Accounting	3(3-0-6)	✓	-	
5	MTS 314	International Trade and Business	3(3-0-6)	✓	-	
6	MTS 331	Economic Decision Analysis	3(3-0-6)	✓	-	
7	MTS 351	Management Systems Optimization	3(3-0-6)	✓	-	
8	MTS 381	Business Information Systems	3(3-0-6)	✓	-	
9	MTS 412	Business Finance	3(3-0-6)	✓	-	
10	MTS 481	Business Process Simulation	3(3-0-6)	✓	-	

Logistics and Supply Chain Systems Engineering (LSCSE) Program (Graduate courses)

No	Code	Course Name	Credits	B2-B4	M-D	Remark
1	SE 601	Logistics and Supply Chain Systems	3 (3-0-9)	-	✓	
2	SE 613	Transportation Systems Design and Analysis	3 (3-0-9)	-	✓	
3	SE 614	Warehouse Design and Operations	3 (3-0-9)	-	✓	
4	SE 616	Design of Experiments in Supply Chain Systems	3 (3-0-9)	-	✓	

Students from countries listed below are excluded from enrolling in EL171, EL172, and EL210.

Africa

Botswana
Cameroon
Ethiopia
Eritrea
The Gambia
Ghana
Kenya
Lesotho
Liberia
Malawi
Mauritius
Namibia
Nigeria
Rwanda
Seychelles
Sierra Leone
South Africa
South Sudan
Sudan
Swaziland
Tanzania
Uganda
Zambia
Zimbabwe

Americas

Antigua and Barbuda
The Bahamas
Barbados
Belize
Canada
Dominica
Grenada
Guyana
Jamaica
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Trinidad and Tobago
United States
Argentina

Asia

India
Pakistan
Philippines
Singapore
Malaysia

Australia/Oceania

Australia
Fiji
Kiribati
Marshall Islands
Federated States of Micronesia
Nauru
New Zealand
Palau
Papua New Guinea
Samoa
Solomon Islands
Tonga
Tuvalu
Vanuatu

Europe

Ireland
Malta
United Kingdom
Netherlands
Denmark
Sweden
Norway
Finland
Luxembourg
Austria
Germany
Poland
Belgium
Switzerland
Portugal
Czech Republic
Serbia
Hungary
Romania