

Curriculum for Academic Year 2013/2014

Automation and Applied Informatics

Semester 1

MBEM0011	Mathematical Analysis I	3+2+0	E	5	cr.
MBEM0081	Linear Algebra, Analytical and Differential Geometry	2+1+0	E	4	cr.
MBEF0011	Physics I	2+1+1	E	5	cr.
MBEI0101	Programming I	2+0+2	E	5	cr.
MBMM0111	Graphics on Computer	2+0+2	C	4	cr.
MBEM0131	Probability and Statistics	2+0+2	E	4	cr.
MBHX0011	English Language I	0+2+0	C	2	cr.

Other Compulsory Courses:

MBSX0011	Physical Education I	0+1+0	A	1	cr.
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Facultative Courses:

MBEM0181	Special Chapters of Mathematics	1+2+0	C	2	cr.
MBHM0011	History of Culture I	2+0+0	C	2	cr.

Semester 2

MBEM0101	Numerical Analysis	2+0+2	C	4	cr.
MBEI0102	Programming II	2+0+2	E	5	cr.
MBEF0012	Physics II	2+1+1	C	4	cr.
MBMV0011	Electrotechnics	2+1+1	E	5	cr.
MBME0051	Electronic Devices and Analogical Electronics	2+1+2	E	5	cr.
MBEI0341	Algorithm Design	2+0+2	E	4	cr.
MBHX0012	English Language II	0+2+0	C	2	cr.

Other Compulsory Courses:

MBSX0012	Physical Education II	0+1+0	A	1	cr.
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Facultative Courses:

MBEI0371	Special Chapters of Informatics	1+2+0	C	2	cr.
MBHM0012	History of Culture II	2+0+0	C	2	cr.

Semester 3

MBEM0111	Special Mathematics	2+2+0	E	4	cr.
MBME0021	Digital System Design	2+1+2	E	5	cr.
MBME0071	Linear Electronic Circuits	2+0+2	E	5	cr.
MBEI0131	Databases	2+0+2	C	4	cr.
MBEI0103	Programming III	2+0+2	E	5	cr.
MBMV0012	Electrotechnics II	2+1+1	E	4	cr.
MBHX0013	English Language III	0+2+0	C	2	cr.

Other Compulsory Courses:

MBSX0013	Physical Education III	0+1+0	A	1	cr.
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Facultative Courses:

MHM0013	The history of culture III.	2+0+0	C	2	cr.
MBHX0031	German Language I	0+2+0	C	2	cr.

Semester 4

MBEI0123	Operating Systems	2+0+2	E	4	cr.
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MBME0041	Digital Electronics	3+0+2	E	5	cr.
MBMM0021	Mechanics	2+0+1	C	3	cr.
MBMS0031	Systems Theory I	2+1+1	E	5	cr.
MBMV0231	Measuring and Transducers	3+0+2	E	5	cr.
MBME0031	Power Electronics	2+0+1	E	4	cr.
MBHX0014	English Language IV	0+2+0	C	2	cr.
MBMS0012	Professional Practice I	0+6+0	C	2	cr.

Facultative Courses:

MHM0014	The history of culture IV.	2+0+0	C	2	cr.
MBHX0032	German Language II	0+2+0	C	2	cr.

Semester 5

MBMS0091	Computer Networks	2+0+1	E	4	cr.
MBMV0071	Identification, Modelling and Simulation of Systems	2+0+2	E	4	cr.
MBMS0032	Systems Theory II	2+1+1	E	4	cr.
MBMS0041	Computer Architecture	2+0+2	E	5	cr.
MBMS0131	Optimization	2+0+2	E	5	cr.
MBMS0071	Software Engineering I	2+0+1	C	4	cr.
MBMV0111	Programable Logic Controllers	2+0+2	C	4	cr.

Facultative Courses:

MBHX0015	English Language V	0+2+0	C	2	cr.
MBHX0033	German Language III	0+2+0	C	2	cr.
MBME0081	Telecommunication Networks	2+0+2	C	3	cr.

Semester 6

MBMS0111	Control Engineering	2+0+2	E	4	cr.
MBMV0041	Microprocessors	2+0+2	E	4	cr.
MBMV0031	Electrical Machines and Drives	2+0+2	E	4	cr.
MBMS0132	Optimization II	2+0+2	E	4	cr.
MBEI0211	Web Technology	2+0+2	C	4	cr.
MBEI0111	Artificial Intelligence	2+0+2	E	4	cr.
MBMS0013	Professional Practice II	0+6+0	C	2	cr.
MBAY0101	Optional Course 1	2+0+2	C	4	cr.

Facultative Courses:

MBHX0016	English Language VI	0+2+0	C	2	cr.
MBHX0034	German Language IV	0+2+0	C	2	cr.
MBMV0211	IP Telephone Networks	2+0+2	C	3	cr.

Optional Discipline Packet 1

MEI0201	Assembly Programming Languages	2+0+2	C	4	cr.
MBEI0241	Coding Theory	2+0+2	C	4	cr.

Semester 7

MBMV0081	Controlled Electrical Drives	2+0+2	E	5	cr.
MBMR0161	Robotics	2+0+2	E	4	cr.
MBMV0091	Digital Control Systems	2+0+1	E	5	cr.
MBEI0361	Artificial Intelligence	2+0+2	C	4	cr.
MBMS0211	Adaptive Control Systems	2+0+2	E	4	cr.
MBAY0102	Optional Course 2	2+0+2	E	4	cr.
MBAY0103	Optional Course 3	2+0+1	E	4	cr.

Optional Discipline Packet 2

MBMS0051	Image Processing	2+0+2	E	4	cr.
MBMV0141	SCADA Systems and Industrial Communications	2+0+2	E	4	cr.

Optional Discipline Packet 3

MBME0061	Digital Circuits	2+0+1	E	4	cr.
MBEI0201	Computer Graphics	2+0+1	E	4	cr.

Semester 8

MBMS0101 Digital Signal Processing	2+0+2 E 4 cr.
MBML0011 Practice for Graduation Project	0+0+5 C 7 cr.
MBGM0061 Project Management	0+0+0 C 3 cr.
MBAY0104 Optional Course 4	2+0+2 E 5 cr.
MBAY0105 Optional Course 5	2+1+0 C 3 cr.
MBAY0106 Optional Course 6	2+0+2 E 4 cr.
MBAY0107 Optional Course 7	2+0+2 E 4 cr.

Optional Discipline Packet 4

MBMS0221 Expert Systems	2+0+2 E 5 cr.
MBMS0201 Testing of Computer Systems	2+0+2 E 5 cr.

Optional Discipline Packet 5

MBGM0021 Quality Assurance Systems	2+1+0 C 3 cr.
MBGM0011 Management	2+1+0 C 3 cr.

Optional Discipline Packet 6

MBMV0161 Model Predictive Control	2+0+2 E 4 cr.
MBMV0151 Reliability	2+0+2 E 4 cr.

Optional Discipline Packet 7

MBMV0171 Computer Peripherals and Interfaces	2+0+2 E 4 cr.
MBMS0141 Distributed Systems	2+0+2 E 4 cr.