

Curriculum for Academic Year 2013/2014

Computer Science (Informatics)

Semester 1

MBEM0021	Linear Algebra	2+2+0	E	5	cr.
MBEM0011	Mathematical Analysis I	2+2+0	E	5	cr.
MBEI0091	Computer Architecture	2+0+2	E	6	cr.
MBEM0151	Discrete Mathematics	2+2+0	E	5	cr.
MBHX0011	English Language I	0+2+0	C	2	cr.
MBEI0011	Computer programming and programming languages	2+1+2	E	6	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.
MBHP0321	Applied Psychology	0+0+1	C	1	cr.

Semester 2

MBEI0041	Data Structures and Algorithms	2+0+2	E	5	cr.
MBEM0012	Mathematical Analysis II	2+2+0	E	4	cr.
MBEM0041	Analytic and Differential Geometry	2+2+0	E	4	cr.
MBEM0051	Computational Logics	2+1+0	E	4	cr.
MBEI0012	Procedural Programming	2+0+2	E	5	cr.
MBHX0012	English Language II	0+2+0	C	2	cr.
MBIY0101	Optional Course 1	3+1+1	C	5	cr.

Other Compulsory Courses:

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

MBHM0012	History of Culture II	2+0+0	C	2	cr.
MBEI0371	Special Chapters of Informatics	1+0+2	C	2	cr.
MBHP0321	Applied Psychology	0+0+1	C	1	cr.

Optional Discipline Packet 1

MBEM0061	Algorithmic Number Theory	3+1+1	C	5	cr.
MBEM0071	Number Theory in Computer Sciences	3+1+1	C	5	cr.

Semester 3

MBEI0131	Databases	2+0+2	E	4	cr.
MBEM0121	Differential Equations and Dynamic Systems	2+2+0	E	4	cr.
MBEI0191	Logical and Functional Programming	2+0+2	C	4	cr.
MBEI0141	Object Oriented Programming	2+0+2	E	5	cr.
MBEI0121	Operating Systems I	2+0+2	E	5	cr.
MBHX0013	English Language III	0+2+0	C	2	cr.
MBIY0102	Optional Course 2	3+0+2	C	5	cr.

Other Compulsory Courses:

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

MBEI0751	Scientific Documents in LATEX	2+0+1	C	2	cr.
MBHX0021	French Language I	0+2+0	C	2	cr.
MBHX0031	German Language I	0+2+0	C	2	cr.
MBHM0013	History of Culture III	2+0+0	C	2	cr.

Optional Discipline Packet 2

MBEM0141	Algebraic Basic Notions of Computer Sciences	3+2+0	C	5	cr.
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MBEI0201 Computer Graphics 3+0+2 C 5 cr.

Semester 4

MBEI0132 Databases II 2+0+2 C 4 cr.
MBEM0101 Numerical Analysis 2+0+2 E 4 cr.
MBEI0032 Practice in Computer Science 0+6+0 C 2 cr.
MBEM0131 Probability and Statistics 2+0+2 E 3 cr.
MBEI0331 Graphical User Interface Design 1+0+1 E 3 cr.
MBEI0122 Operating Systems II 2+0+2 E 4 cr.
MBEI0161 Advanced Programming Methods 2+0+2 C 4 cr.
MBEI0211 Web Technology 2+0+2 E 4 cr.
MBHX0014 English Language IV 0+2+0 E 2 cr.

Facultative Courses:

MBHX0022 French Language II 0+2+0 C 2 cr.
MBHX0032 German Language II 0+2+0 C 2 cr.
MBHM0014 History of Culture IV 2+0+0 C 2 cr.

Semester 5

MBEI0204 Graph Theory 2+0+2 E 4 cr.
MBMS0071 Software Engineering I 2+0+2 E 4 cr.
MBEI0171 Formal Languages and Compilers 2+0+2 E 4 cr.
MBEI0332 Graphical User Interface Design II 1+0+1 E 3 cr.
MBMS0091 Computer Networks 2+0+2 E 4 cr.
MBMS0061 Optimization Methods 2+0+2 C 3 cr.
MBEI0271 Java Technology 2+0+2 C 4 cr.
MBIY0103 Optional Course 3 2+0+2 E 4 cr.

Facultative Courses:

MBHX0015 English Language V 0+2+0 C 2 cr.
MBHX0033 German Language III 0+2+0 C 2 cr.
MBHX0023 French Language III 0+2+0 C 2 cr.

Optional Discipline Packet 3

MBEI0241 Coding Theory 2+0+2 E 4 cr.
MBMS0051 Image Processing 2+0+2 E 4 cr.

Semester 6

MBEI0232 Cryptography 2+0+2 C 4 cr.
MBEI0111 Artificial Intelligence 2+0+2 E 4 cr.
MBLI0011 Elaboration of Diploma Paper 0+0+3 C 7 cr.
MBIY0104 Optional Course 4 3+0+2 C 5 cr.
MBIY0105 Optional Course 5 2+0+2 C 5 cr.
MBIY0106 Optional Course 6 2+0+2 C 5 cr.

Facultative Courses:

MBHX0016 English Language VI 0+2+0 C 2 cr.
MBHX0034 German Language IV 0+2+0 C 2 cr.
MBHX0024 French Language IV 0+2+0 C 2 cr.

Optional Discipline Packet 4

MBEM0161 Differential Equations and Discrete Dynamic Systems 3+2+0 C 5 cr.
MBEI0261 Combinatorial Methods in Networks 3+0+2 C 5 cr.

Optional Discipline Packet 5

MBEI0251 Computational Algebra 2+0+2 C 5 cr.
MBEI0221 Assembly Programming Languages 2+0+2 C 5 cr.
MBEI0351 Signal Processing 2+0+2 C 5 cr.

Optional Discipline Packet 6

MBEI0281 Computational Geometry 2+0+2 C 5 cr.
MBEI0291 Distributed Systems 2+0+2 C 5 cr.