Mississippi Community College Transfer Advising Guide for Students Transferring to Mississippi State University College of Engineering

For students who will be Freshmen AY 2010-11		Semester Hours Applied for Specific Major										April 2010
Description	**Community College Course Number**	ASE	BE	CHE	CE	CPE	CS	EE	IE	ME	SE	**Comments**
English Comp.	ENG 1113, 1123	6	6	6	6	6	6	6	6	6	6	
Speech	SPT 1113	0	0	0	0	3	3	3	3	0	3	
Humanities	History, Foreign Lang., Lit. Phil. Religion	6	6	6	6	6	6	6	6	6	6	"Bible" courses are not accepted.
Fine Arts	ART or MUS 1113	3	3	3	3	3	3	3	3	3	3	
Social Science	ECO/GEO/PSC/PSY/SOC PSY 1523 not accepted	6	6	6	6	6	6	6	6	6	6	IEs should take ECO 2123 and PSY 1513
Chem. I, Lab	CHE 1214	4	4	4	4	4	4	4	4	4	4	
Chem. II, Lab	CHE 1224	0	4	4	4	0	0	0	3	4	0	
Organic Chem.	CHE 2424, 2434	0	4	6	0	0	0	0	0	0	0	
Physics (Calculus-based)	PHY 2514, 2524 or PHY 2313, 2323, & 2333	8	6	6	6	6	6	6	6	8	6	BE, CHE, CPE, CS, EE, IE, and SE do not take "Light and Sound".
Biology	BIO 1314 or 2414 (only BIO 2414 is used for BE)	0	4	3	0	0	4	0	0	0	4	CHE will use as technical elective.
Calculus	MAT 1613, 1623, 2613, 2623	12	12	12	12	12	12	12	12	12	12	Or MAT 1815, 1825, 2623. CS will use 2623 as tech. elec.
Diff. Eq. I	MAT 2913	3	3	3	3	3	3	3	3	3	3	CS will use as tech.l elec. SE will take either MAT 2913 or MAT 2113. IE will use as sci/math elec.
Linear Algebra	MAT 2113	3	0	3	3	3	3	3	3	3	0	SE takes MAT 2913 or MAT 2113. Tech Elec. For CE.
Structured Prgrmng (C, Visual Basic, Fortran)	CSC 1213 or 2323	0	3	0	0	0	0	0	0	3	0	BE should take C or C++. See note on back of page.
Object-Oriented Programming	CSC 1613 & 2623 or CSC 2134 & 2144	0	0	0	0	6	8	6	0	0	6	
Graph. Comm.	GRA 1143 (CAD)	0	3	0	3	0	0	0	2	0	0	
Engr. Mech. I	EGR 2413	3	3	3	3	0	0	3	3	3	0	
Engr. Mech II	EGR 2433	3	3	0	3	0	0	0	3	3	0	
Total Hours Available at Community Colleges Which are Possible to Apply Towards Degree (max. of 64 hours can be applied to a degree)		**57**	**70**	**65**	**62**	**58**	**64**	**61**	**63**	**64**	**59**	**Note: Only 64 hours may be applied to a degree (65 for CE).**

Majors: ASE= Aerospace, BE=Biological, CHE=Chemical, CE=Civil, CPE=Computer Engineering, CS=Computer Science, EE=Electrical, IE=Industrial, ME=Mechanical, SE=Software. Only grades of C or better will apply toward degree.

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Application of Mississippi Community College Courses to Degree Programs in the Bagley College of Engineering at Mississippi State University

Courses taken at Community and Junior Colleges may be transferred to Mississippi State University. Courses may be applied to engineering degree programs as detailed above. Only courses in which a student has obtained a grade of 'C' or better will be applied. All courses will, however, appear on the student's transcript and be used in calculating cumulative grade point averages. The number of hours that may be applied to a degree varies with each program. Up to a maximum of one-half of the total hours in a degree program may be transferred from a two-year institution. In some programs one-half of the hours are not taught in two-year institutions so the total hours to be transferred are less than half the total degree hours. If a zero is entered for a course above, then that particular course is not required for that major and no credit can be given. Please visit our web page at www.bagley.msstate.edu for the latest information.

All engineering programs require a total of 128 hours for graduation with the exception of Civil Engineering which requires 130 hours. Therefore a maximum of 64 hours (65for CE) from an accredited two-year institution may be applied to a degree.

All students are encouraged to take SPT 1113 Public Speaking even if it is not a part of the program of study. This class will prove useful to all engineers in their careers.

Only humanities, social/behavioral sciences, and fine arts that articulate directly to courses listed as Mississippi State University Core Curriculum Courses in the MSU Bulletin will apply towards a degree. PSY 1523, General Psychology II will not be applied to a degree program. Old Testament, New Testament and similar "Bible" courses are not accepted; World Religions and similar courses are applicable to a degree. Please consult your Community/Junior College advisor if you have questions.

Application of Community /Junior College Computer Science (CSC) Courses to Bagley College of Engineering Curricula

As a result of the computer initiative in the Bagley College of Engineering and the ever evolving software in use, many programs have eliminated formal programming courses and others have made modifications to their programming requirements. Some specifics are listed below.

Biological Engineering

One course in C or C++ is required. This may be taught from either a functional or object-oriented approach.

Mechanical Engineering

One course in structured or object-oriented programming is required. The intent of the course is to develop logical problem-solving skills. This may be C, Visual Basic, or FORTRAN.

Aerospace, Chemical, Civil, and Industrial Engineering

There is no separate programming requirement for these degrees. The necessary computing and programming skills are developed within the curriculum major courses.

Computer Engineering, Computer Science, Electrical Engineering and Software Engineering

Object-oriented programming is required. The programming language used is not as important as is the fact that the programming course be taught using the object-oriented approach. The table below serves as a guide for placement in Computer Science Courses at MSU. Additional credit may be given on an individual basis after and evaluation is performed by the Computer Science Department.

Computer Science (CSC) Courses Completed at CC/JC	Hours Applied to MSU degree in CPE, CS, EE, SE	MSU CSE Course Placement (course for which pre-requisites have been met)
None or Functional-Oriented Programming	0	CSE 1284 Introduction to Computer Programming
4 hours in object-oriented programming	4	CSE 1384 Intermediate Computer Programming
8 hours in object-oriented programming, including lists and stacks	8	CSE 2383 Data Structures and Analysis of Algorithms