

Montgomery College Transfer Advising for Students Applying to UM Majors:

- Information Science “InfoSci” – pages 1 & 2
- Information Systems (Business) “IS” – pages 3 & 4

UM’s Information Science (InfoSci) – Bachelor of Science

1. **Information Science at located at UM Main Campus:**
<https://ischool.umd.edu/academics/bachelors-programs/bachelor-of-science-in-information-science-college-park/curriculum-cognate-areas/>
2. **Information Science UM located at the Universities at Shady Grove USG** (a Fall-entrance only program) <https://shadygrove.umd.edu/academics/degree-programs/bs-information-science-minors-available>

UM’s Information Science major teaches students “skills in technical areas such as database design, information architecture, web/mobile development, data analytics, and cybersecurity along with areas of the social sciences, leadership, and the humanities – addressing the growing and unique need for information professionals who understand complex social and organizational issues”.

InfoSci graduates go on to careers in data science and analytics, database administration, UX/UI, technology development, digital curation, cybersecurity, web content and development, systems architecture, and more. See also [“18 Careers in Information Science”](#) from Indeed.com

UM Information Science Upper-level Optional Cognate (specialization) Areas

- **Cybersecurity & Privacy** - for careers in the cybersecurity field with particular emphasis on management, policy, and governance-related functions
- **Data Science** – for careers managing, manipulating, and mobilizing data to develop insight, create value, and achieve organizational goals in a wide range of sectors.
- **Digital Curation** – for careers in which they collect, digitize, appraise, curate, and disseminate information assets effectively and efficiently.
- **Health Information** – for careers that involve informing the decisions made by health professionals, patients, and policy makers with an emphasis on equity and accessibility.

Information Science Career Titles: Data Analyst, Data Scientist, Data Steward, Database Administrator, Computer Science/Technology Educator. Digital Curation Specialist, Requirements Analyst, Systems Architect, Data Architect, Project Manager, Information Security Specialist, Cyber-Threat Analyst

Information Science is not a Limited Enrollment Program (LEP) degree; there are no Gateway requirements to apply for transfer admission to UM. Enrollment in MTAP (the Maryland Transfer Advantage Program) is suggested; requirements include an overall GPA of 3.0, see go.umd.edu/mtap and go.umd.edu/mtapfaq for details.

Students may follow any one of three MC degrees to transfer to UM Info Sci: **1) Information Science and Systems AA 109** (next page); or **2) Computer Science AA**, or **3) General Studies STEM**.

Courses for any of the above degrees should include: MATH 150 Elementary Applied Calculus or MATH 165 Precalculus or MATH 181 Calculus I; PSYC 102 General Psychology, MATH 117 Elements of Statistics or BSAD 210, CMSC 140 Computer Programming, and additional CMSC programming classes are suggested, see Program Electives chart for the **Information Sciences and Systems AA Code 109 degree on the next page.**

TRANSFER ADVISING FOR UM INFORMATION SCIENCE BS at COLLEGE PARK or SHADY GROVE

Name:

Date:

ID #: M

GENERAL EDUCATION: FOUNDATION COURSES	Course	Hours	Grade
English Foundation (ENGL 102 or ENGL 103, grade of C or better required to graduate)		3	
Math Foundation MATH 150 ELEMENTARY APPLIED CALC OR MATH 165 PRECALCULUS OR MATH 181 CALCULUS I	MATH 150 or 165 or 181	4	
GENERAL EDUCATION: DISTRIBUTION COURSES	Course	Hours	Grade
Arts Distribution (ARTD)		3	
Humanities Distribution (HUMD)		3	
Behavioral & Social Sciences Distribution (BSSD) **	PSYC 100 (former 102)	3	
Behavioral & Social Sciences Distribution (BSSD) **		3	
Natural Sciences Distribution with Lab (NSLD)		4	
Natural Sciences Distribution without Lab (NSND) or Natural Sciences Distribution with Lab (NSLD)		3 or 4	
General Education Institutional Requirement (GEIR)	COMM 108 or COMM 112	3	
ARTD, HUMD or HLTH †† (GEIR) Choose course from General Education ARTD, HUMD, or HLTH course list . Discuss appropriate course choice with Program Advisor or Counselor.		3	
PROGRAM REQUIREMENTS	Course	Hours	Grade
ENGL 101 or ENGL 101A (if needed for ENGL102/103 or Elective) *	ENGL 101 or ENGL 101A	3	
CMSC 110 COMPUTER CONCEPTS	CMSC 110 ‡	3	
CMSC 140 INTRO TO PROGRAMMING	CMSC 140	3	
CMSC 243 SYSTEMS ANALYSIS AND DESIGN	CMSC 243	3	
Program Electives must total 17 credits:	PROGRAM ELECTIVE †	MATH 117 or BSAD 210 Statistics required	3
	PROGRAM ELECTIVE †		3
	PROGRAM ELECTIVE †		3
	PROGRAM ELECTIVE †		3 - 4
	PROGRAM ELECTIVE †		3 - 4
	PROGRAM ELECTIVE † (*if needed to reach 17 credits)		2*

Has student completed the Global Perspectives requirement? Yes No Global Persp Course _____

TOTAL CREDITS:

Has student completed a minimum of 12 credits at the 200 level for completion of the program? Yes No

‡ May be replaced by another CMSC course from the list below with departmental consent. [MC Computer Science and Information Systems Website](#)

† PROGRAM ELECTIVES for Transfer to UM Information Science Majors Main Campus or Shady Grove

ACCT 221 PRIN OF ACCOUNTING I, ACCT 222 PRIN OF ACCOUNTING II BSAD 101 INTRO TO BUSINESS BSAD 210 STATISTICS FOR BUSINESS ADMINISTRATION CMAP 120 INTRO COMPUTER APPLICATIONS only CMSC 135 INTRO TO SCRIPTING CMSC 201 JAVA , CMSC 214 ADVANCED JAVA CMSC 203, 204 Computer Science I, II * CMSC 206 PYTHON PROGRAMMING (RECOMMENDED for Info Sci) CMSC 207 DISCRETE STRUCTURES CMSC 222 VISUAL PROGRAMMING CMSC 226 INTRO OBJECT-ORIENTED PROG.	CMSC 246 INTRO SQL USING ORACLE CMSC 250 UNIX/LINUX OPERATING SYSTEMS CMSC 260 COMPUTER SECURITY DATA 101 INTRO TO DATA SCIENCE DATA 110 DATA VISUALIZATION DATA 201 STAT METHODS IN DATA SCI ECON 201 PRIN OF ECONOMICS, ECON 202 PRIN OF ECON II MATH 181 CALC I, MATH 182 CALC II MGMT 101 INTRO MGMT MGMT 211 INTRO MARKETING
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MC Computer Science and Information Science: www.montgomerycollege.edu/academics/programs/computer-science-and-technologies/index.html

UM Information Science Major at College Park: <https://ischool.umd.edu/academics>

UM Information Science Major at Shady Grove: <https://ischool.umd.edu/academics/bachelors-programs/bachelor-of-science-in-information-science-shady-grove/> Fall-Entrance only. Minimum courses for IS USG are MATH 150 or 165 or 181; MATH 117, CMSC 140 or higher, PSYC 100.

Information Science & Systems AA is not required for transfer to UM Information Science major; other MC degree options are Computer Science AA or General Studies STEM AA. Contact UM Pre-Transfer Advisors for transfer planning: go.umd.edu/MC2UMD

The [Information Systems major is offered at UM Main Campus](#) through the Smith School of Business (IS)

“The Information Systems major prepares graduates to plan, use and manage information technologies and systems through a focus on system design and implementation skills, including database and web design. These core concepts provide a foundation for careers in consulting, data analytics and information systems management.” View [common IS major questions](#) in the UM [Smith Information Systems Hub](#). This is a Limited Enrollment Program (LEP) with competitive requirements described below.

The **Information Systems major at UM** requires courses for Business majors including *three Gateway Courses* of
1) MATH 150 Elementary Applied Calculus or MATH 181 Calculus I
2) MATH 117 Elements of Statistics or BSAD 210 Stat for Business Administration;
3) ACCT 221 Principles of Accounting I

Students may follow **either** Montgomery College’s [Business AA 006 degree](#) with no additional CMSC courses required beyond CMSC 110 or CMAP 120; **or follow the MC Computer Science and Technologies Degree: Information Science and Systems AA 109 Area of Concentration** to prepare for a transfer to UM Information Systems – BMGT. Neither degree is “preferred” over the other for admission to Information Systems at UM. Technology/computer courses related to Information Systems are taken at the upper-level after transfer admission to the Smith School of Business.

Students following the **MC Information Science and Systems AA** degree to prepare for transfer to UM Information Systems should include ACCT 221, 222, ECON 201, 202, MATH 150, MATH 117 or BSAD 210 in the Foundation and Program Electives for this degree. Please note that MC Info Sci and Systems AA Program Electives of MGMT 101 and 211 are NOT accepted as transferable courses for business majors at UM including Information Sciences – BMGT.

A sample MC Information Science and Systems Worksheet showing **UM Requirements for Information Systems following the MC Information Science and Systems AA** is shown on the next page.

The **Information Systems – Business** degree at UM has specific competitive requirements including the *Gateway courses* and other requirements outlined on the UM page and summarized here:

UM Information Systems BMGT LEP Competitive Requirements [UM Business LEP Limited Enrollment Program](#)
Gateway courses:

- Completion of BMGT220 [Principles of Accounting I = **MC ACCT 221**] with a minimum grade of C-
- Completion of BMGT230 Statistics = **MC BSAD 210 or MATH 117**] with a minimum grade of C-
- Completion of MATH120 or 140 [Applied Calculus I or Calculus I = **MC MATH 150 or 181**] with a minimum grade of C- or above
- Applicant must have earned at least 45 cumulative credits by end of the semester that an application for transfer admission has been submitted
- A minimum grade point average of 3.0 in all college coursework is required for consideration for all transfer applicants
- Students applying to Business, who have completed all of the LEP Gateway requirements, and have a 3.6 or higher cumulative grade point average across all attempted college coursework will be directly admitted into the Business major. Students applying to Business, who have completed all of the LEP Gateway requirements, and have a 3.0 - 3.599 cumulative grade point average across all attempted college coursework will undergo a competitive review for admission to the Business major.

The following guideline pertains to all Limited Enrollment Programs:

- Only one gateway or performance review course may be repeated to earn the required grade and that course may only be repeated once. When more than one course can satisfy a gateway requirement, taking a second course from the list will count as a repeat. Please note that a grade of "W" is considered an attempt and must be repeated.

The next page shows how to incorporate UM Information Systems BMGT courses into the **MC Information Science and Systems AA degree**.

TRANSFER ADVISING FOR UM INFORMATION SYSTEMS – BMGT BUSINESS UM COLLEGE PARK

Name:

Date:

ID #: M

GENERAL EDUCATION: FOUNDATION COURSES		Course	Hours	Grade
English Foundation (ENGL 102 or ENGL 103, grade of C or better required to graduate)			3	
Math Foundation MATH 150 ELEMENTARY APPLIED CALC OR MATH 181 CALCULUS I		MATH 150 or 181	4	
GENERAL EDUCATION: DISTRIBUTION COURSES		Course	Hours	Grade
Arts Distribution (ARTD)			3	
Humanities Distribution (HUMD)			3	
Behavioral & Social Sciences Distribution (BSSD) **		ECON 201 Prin. of Econ I	3	
Behavioral & Social Sciences Distribution (BSSD) **			3	
Natural Sciences Distribution with Lab (NSLD)			4	
Natural Sciences Distribution without Lab (NSND) or Natural Sciences Distribution with Lab (NSLD)			3 or 4	
General Education Institutional Requirement (GEIR)		COMM 108 or COMM 112	3	
ARTD, HUMD or HLTH †† (GEIR) Choose course from General Education ARTD, HUMD, or HLTH course list . Discuss appropriate course choice with Program Advisor or Counselor.			3	
PROGRAM REQUIREMENTS		Course	Hours	Grade
ENGL 101 or ENGL 101A (if needed for ENGL102/103 or Elective) *		ENGL 101 or ENGL 101A	3	
CMSC 110 COMPUTER CONCEPTS		CMSC 110 ‡	3	
CMSC 140 INTRO TO PROGRAMMING		CMSC 140	3	
CMSC 243 SYSTEMS ANALYSIS AND DESIGN		CMSC 243	3	
Program Electives must total 17 credits:	PROGRAM ELECTIVE †	BSAD 101 or Program Elective	3	
	PROGRAM ELECTIVE †	ECON 202	3	
	PROGRAM ELECTIVE †	MATH 117 or BSAD 210 Statistics	3	
	PROGRAM ELECTIVE †	ACCT 221 Prin of Accounting I %	3 - 4	
	PROGRAM ELECTIVE †	ACCT 222 Prin of Accounting II	3 - 4	
	PROGRAM ELECTIVE † (*if needed to reach 17 credits)		2*	

Has student completed the Global Perspectives requirement? Yes No Global Persp Course _____

TOTAL CREDITS

Has student completed a minimum of 12 credits at the 200 level for completion of the program? Yes No

‡ May be replaced by another CMSC course from the list below with departmental consent. [MC Computer Science and Information Systems Website](#)

† **PROGRAM ELECTIVES for Transfer to UM Information Science Majors Main Campus or Shady Grove**

ACCT 221 PRIN OF ACCOUNTING I, ACCT 222 PRIN OF ACCOUNTING II BSAD 101 INTRO TO BUSINESS BSAD 210 STATISTICS FOR BUSINESS ADMINISTRATION or MATH 117 CMAP 120 INTRO COMPUTER APPLICATIONS only CMSC 135 INTRO TO SCRIPTING CMSC 201 JAVA , CMSC 214 ADVANCED JAVA CMSC 203, 204 Computer Science I, II CMSC 206 PYTHON PROGRAMMING CMSC 207 DISCRETE STRUCTURES CMSC 222 VISUAL PROGRAMMING	CMSC 226 INTRO OBJECT-ORIENTED PROG. CMSC 246 INTRO SQL USING ORACLE CMSC 250 UNIX/LINUX OPERATING SYSTEMS CMSC 260 COMPUTER SECURITY DATA 101 INTRO TO DATA SCIENCE DATA 110 DATA VISUALIZATION DATA 201 STAT METHODS IN DATA SCI ECON 201 PRIN OF ECONOMICS, ECON 202 PRIN OF ECON II MATH 181 CALC I, MATH 182 CALC II
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MC Computer Science and Information Science: www.montgomerycollege.edu/academics/programs/computer-science-and-technologies/index.html

UM Information Systems Major at College Park: <https://academiccatalog.umd.edu/undergraduate/colleges-schools/business/decision-operations-information-technologies/information-systems-major-business-specialization/>

UM Limited Enrollment Program Requirements for Admission to UM Information Systems BMGT lep.umd.edu/business.html

Contact UM Pre-Transfer Advisors for transfer planning: go.umd.edu/MC2UMD