

JMU College of Business Advising Checklist

Computer Information Systems, BBA

A Bachelor of Business Administration (BBA) in Computer Information Systems (CIS) from James Madison University requires a minimum of 120 credit hours of undergraduate coursework, comprised of the following:

- BBA Core (45 credit hours)
- CIS Major (27-28 credit hours)
- JMU General Education Program (35-41 credit hours): <https://www.jmu.edu/gened/>
- Electives to meet the minimum 120 credit hours (minimum of 60 from a 4-year school, minimum of 30 from JMU)

This document is provided as an advising resource only. Official curriculum requirements are listed in the JMU Undergraduate Catalog: <https://www.jmu.edu/catalog/>. In the case of discrepancies, the University Catalog is the official curriculum students must follow. This document was reviewed by the Director of the CoB Advising and Support Center on July 13, 2023. For more information contact the CoB Advising and Support Center: <https://www.jmu.edu/cobasc>.

Bachelor of Business Administration (BBA) Core Requirements

All students seeking a BBA degree must complete all of the BBA core components (45 credit hours) and be formally accepted to the CoB as a part of their degree program. The BBA core components are broken down into two groups, the lower-level core (completed before formal acceptance) and the upper-level core (completed after formal acceptance).

BBA Core Progression: Formal Acceptance to the CoB

To be formally accepted to the College of Business, students seeking a BBA degree must complete the following requirements.

- Complete all lower-level BBA core requirements. No lower-level core course may be attempted more than two times.
- Earn a BBA GPA of at least a 2.7 earned in lower-level BBA core courses excluding calculus and COB 242. The university policy for calculating repeat credit and repeat forgiveness will be honored. Only grades received at JMU are used in the GPA calculation.
- Complete a COB 300 application by the deadline for the semester they intend to enroll in COB 300.

The BBA GPA calculator, COB 300 application, and more information are available here: <https://www.jmu.edu/cob/asc/advising/formal-acceptance.shtml>

Lower-Level BBA Core Requirements (27 credit hours completed before formal acceptance)

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> COB 191 – Business Analytics I ¹	3	Pre: MATH 155, calculus, or sufficient score on math placement exam
<input type="checkbox"/> COB 202 – Interpersonal Skills	3	Pre: Sophomore standing
<input type="checkbox"/> COB 204 – Computer Information Systems	3	
<input type="checkbox"/> COB 241 – Financial Accounting	3	Pre: Sophomore standing
<input type="checkbox"/> COB 242 – Managerial Accounting	3	Pre: COB 241
<input type="checkbox"/> COB 291 – Business Analytics II	3	Pre: Calculus and COB 191 or equivalent
<input type="checkbox"/> ECON 200 – Introduction to Macroeconomics ²	3	
<input type="checkbox"/> ECON 201 – Introduction to Microeconomics	3	
<input type="checkbox"/> MATH 205 or MATH 235 – Calculus ³	3	Pre: MATH 135/155 or sufficient score on Math Placement Exam
Total	27	

¹ MATH 220 or MATH 229 may be substituted for COB 191. If COB 191 and a substitute are taken and a grade is earned in both, only the COB 191 grade will be used in the BBA GPA calculation.

² ECON 200 also fulfills the Cluster Four Global Experience (C4GE) General Education requirement.

³ MATH 231, MATH 233, or ISAT 151 also fulfills the calculus requirement. Calculus also fulfills the Cluster 3 Quantitative Reasoning (C3QR) General Education requirement.

Upper-Level BBA Core Requirements (18 credit hours completed after formal acceptance)

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> COB 300A – Integrative Business: Management ¹	3	Pre: formal acceptance to the CoB
<input type="checkbox"/> COB 300B – Integrative Business: Finance ¹	3	Pre: formal acceptance to the CoB
<input type="checkbox"/> COB 300C – Integrative Business: Operations ¹	3	Pre: formal acceptance to the CoB
<input type="checkbox"/> COB 300D – Integrative Business: Marketing ¹	3	Pre: formal acceptance to the CoB
<input type="checkbox"/> COB 318 – Legal & Ethical Environment of Business	3	Co: COB 300
<input type="checkbox"/> COB 487 – Strategic Management	3	Pre: COB 318, senior standing, completion of at least one full semester after COB 300
Total	18	

¹ COB 300 courses are taken concurrently during the semester immediately following formal acceptance.

Computer Information Systems (CIS) Major Requirements

CIS majors complete a minimum of 27-28 credit hours of major-specific coursework. All CIS majors complete the CIS major core (15 credit hours) and a concentration (12-13 credit hours). **With the exception of CIS 221, students must be formally accepted to the College of Business before they can take CIS major courses.** It is advised that students complete CIS 221 before COB 300.

CIS Major Core

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> CIS 221 – Principles of Programming ¹	3	
<input type="checkbox"/> CIS 304 – Enterprise Architecture	3	Co: COB 300
<input type="checkbox"/> CIS 330 – Database Design and Application	3	Pre: COB 300 and C or better in CIS 221 or equivalent
<input type="checkbox"/> CIS 331 – Intermediate Computer Programming	3	Co: CIS 330
<input type="checkbox"/> CIS 454 – Systems Analysis and Design	3	Co: CIS 304 and CIS 330
Total	15	

Required Concentration (choose 1)

Business Analytics (BSAN) Concentration

To declare the BSAN concentration, CIS majors must apply to and be accepted to the BSAN program. View the eligibility requirements and application here: <https://www.jmu.edu/cob/cis/academics/bsan-minor.shtml>

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> BSAN 390 – Statistical Modeling for BSAN	3	Pre: B- or better in COB 291, junior or senior standing
<input type="checkbox"/> BSAN 391 – Decision Modeling for BSAN	3	Pre: C or better in BSAN 390
<input type="checkbox"/> BSAN/CIS 393 – Data Mining for BSAN	3	Pre: BSAN 390 and 391
<input type="checkbox"/> CIS 463 – Business Intelligence	3	Pre: C or better in CIS 330
Total	12	

Information and Cybersecurity Management (ICM) Concentration

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> CIS 301 – Cloud Server Management	1	Co: COB 300
<input type="checkbox"/> CIS 320 – Computing & Telecom Networks	3	Co: CIS 304
<input type="checkbox"/> CIS 424 – Computer Security Management	3	Pre: CIS 304; C or better in CIS 221 or equivalent
<input type="checkbox"/> CIS 425 – Defensive Cybersecurity	3	Co: CIS 320
<input type="checkbox"/> CIS 420, CIS 428, CIS 434, or CIS 464 (choose 1) ²	3	Requisites differ by class, see course catalog
Total	13	

Information Systems (IS) Concentration

Class	Credits	Pre-Requisite(s) and/or Co-Requisite(s)
<input type="checkbox"/> CIS 301 – Cloud Server Management	1	Co: COB 300
<input type="checkbox"/> CIS 320 – Computing & Telecom Networks	3	Co: CIS 304
<input type="checkbox"/> CIS 484 – IS Development & Implementation	3	Pre: C or better in CIS 330 and CIS 331, Co: CIS 454
<input type="checkbox"/> CIS elective ³	3	
<input type="checkbox"/> CIS elective ³	3	
Total	13	

¹ CS 139, CS 149, IA 241, or ISAT 252 may be substituted if a C or better was earned. CS 159 may be substituted with any grade.

² CIS 498 – Special Topics may be substituted if topic is related to cybersecurity and approved by CIS-BSAN Department Head.

³ CIS electives include any 300-level or 400-level CIS course not already required by CIS core or IS concentration. A complete list of CIS courses is available in the course catalog: <https://www.jmu.edu/catalog/index.shtml>