



# CIS Minor Checklist

Department of Computer Information Systems & Management Science  
 College of Business  
 James Madison University

Learn to leap across disciplines. This is how breakthroughs come about. It is interdisciplinary combinations - design and technology, science, art, and business - that have produced such breakthrough developments as FaceBook and Google. A minor in Computer Information Systems (CIS) will allow you combine knowledge in the analysis & design of information systems with the understanding you have gained in your primary major. The results can be spectacular!

The minor in Computer Information Systems is structured to provide students pursuing a Bachelor of Business Administration (B.B.A.) with the opportunity to develop the working knowledge necessary to apply information technology to business problems and issues. Students in good standing in the engineering, ISAT or honors programs will also be considered for admission.

**Coordinator:** Dr. Michael Mitri ([mitrimx@jmu.edu](mailto:mitrimx@jmu.edu))

Course	Title	Credit hours	Completed credit hours
COB 204 <sup>1</sup>	Computer Information Systems	3	<input type="checkbox"/>
CIS 221 <sup>1, 2</sup>	Principles of Programming	3	<input type="checkbox"/>
CIS 304 <sup>3</sup>	IT Enterprise Integration	3	<input type="checkbox"/>
CIS 330 <sup>3</sup>	Database Design and Application	3	<input type="checkbox"/>
CIS 454 <sup>3</sup>	Systems Analysis & Design	3	<input type="checkbox"/>
CIS elective <sup>3,4,5</sup>		3	<input type="checkbox"/>
		<b>18</b>	

- 1 Students must take COB 204 and CIS 221 before applying for admission to the CIS minor.
- 2 CS 139 – Algorithm Development or ISAT 252 – Programming and Problem Solving may be substituted for CIS 221 – Principles of Programming.
- 3 Students must complete an application form and be admitted to the CIS minor before enrollment in all 300 and 400 level CIS courses.
- 4 Students majoring in Accounting may substitute ACTG 440 for the CIS elective.
- 5 Electives for the CIS minor include:

CIS 320: Telecommunications Processing  
 CIS 331: Intermediate Programming  
 CIS 354: Advanced Visual Basic  
 CIS 363: Business Process Management  
 CIS 364: Decision Support Systems  
 CIS 366: Web Development

CIS 411: Computer Forensics for Business  
 CIS 424: Computer Security Management  
 CIS 434: Information Technology Consulting  
 CIS 463: Business Intelligence  
 CIS 464: IS Project Management  
 CIS 466: Advanced Web Development