

**B.S. in Computer Information Systems**  
**Career Clusters and Elective Courses Recommendations**

**Application Development**

CSIS 3381	Information Assurance & Security
CSIS 3470	Application Development
CSIS 3472	Human-Computer Interaction
CSIS 4223	Advanced Database
CSIS 4800/4900/ Other cognates*	Independent Study (Senior Project) / Internship / Other CSIS courses

**Cyber Security**

CSIS 3381	Information Assurance & Security
CSIS 3430	Network & System Administration
CSIS 3450	Business Intelligence
CSIS 4110	Digital Forensics
CSIS 4800/4900/ Other cognates*	Independent Study (Senior Project) / Internship / Other CSIS courses

**Data Analytics & Business Intelligence**

CSIS 3240	Enterprise Resource Planning
CSIS 3450	Business Intelligence
CSIS 3470	Application Development
CSIS 4223	Advanced Database
CSIS 4800/4900/ Other cognates*	Independent Study (Senior Project) / Internship / Other CSIS courses

**Database Administration**

CSIS 3240	Enterprise Resource Planning
CSIS 3381	Information Assurance & Security
CSIS 3430	Network & System Administration
CSIS 4223	Advanced Database
CSIS 4800/4900/ Other cognates*	Independent Study (Senior Project) / Internship / Other CSIS courses

**System Analysis & Design**

CSIS 3381	Information Assurance & Security
CSIS 3470	Application Development
CSIS 3472	Human-Computer Interaction
CSIS 4211	Advanced System Analysis
CSIS 4800/4900/ Other cognates*	Independent Study (Senior Project) / Internship / Other CSIS courses

\* Students can take additional CSIS courses or pursue independent study / internship that counts as cognate (up to 4 credits) towards their major.

**CSIS 4800: Independent Study**

- Encourage close working relationships between students and CSIS faculty.
- Students independently develop and work on a clearly defined project that draws on their skills in their area of interest, under the guidance of CSIS faculty
- Provides an opportunity to attain highly individualized, rigorous and personal learning experiences.

**CSIS 4900: Internship**

- Students work for an employer or an agency outside of the academic setting in a carefully designed learning experience.
- Provides a realistic exposure to career opportunities and help apply coursework in professional settings.
- Often lead to early entry into a potential career and gives “real work” experience.