The Department of Computer Information Systems and Quantitative Methods offers an intensive program leading to a Certificate in Computer Information Systems (CIS). The program is directed at students who wish to gain information technology (IT) exposure without having to pursue a full degree program in Computer Information Systems. Students who wish to pursue the Computer Information Systems Certificate are required to be a Texas State University Undergraduate degree seeking or post-baccalaureate student. The primary objective of the program is to offer an option to non-IT professionals and non-CIS majors to gain an initial expertise in the use of information technology to develop computer-based business information systems. Students must apply for admission in the Department of Computer Information Systems and Quantitative Methods prior to taking any courses and successfully complete 18 semester hours of course work in information technology (IT). These include 12 semester credit hours of required core CIS courses and 6 semester credit hours of CIS advanced elective courses.

The certificate requires 18 semester credit hours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 3305</td>
<td>Visual Programming I</td>
<td>3</td>
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<tr>
<td>CIS 3325</td>
<td>Visual Programming II</td>
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</tr>
<tr>
<td>CIS 3374</td>
<td>System Analysis and Design</td>
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<tr>
<td>CIS 3382</td>
<td>Computer Data Base Systems</td>
<td>3</td>
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<td></td>
<td><strong>Electives</strong></td>
<td><strong>6</strong></td>
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<td>Choose 6 hours from the following:</td>
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<tr>
<td>CIS 3350</td>
<td>Information Systems Security</td>
<td></td>
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<tr>
<td>CIS 3360</td>
<td>Web Design and Development</td>
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<tr>
<td>CIS 3389</td>
<td>Programming for Data Processing</td>
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<tr>
<td>CIS 3390</td>
<td>Agile Project Management</td>
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<tr>
<td>CIS 4318</td>
<td>Enterprise System Development and Application Security</td>
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<tr>
<td>CIS 4321</td>
<td>Mobile Application Development for Android</td>
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<tr>
<td>CIS 4322</td>
<td>Computer System Development and Design</td>
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<td>CIS 4332</td>
<td>Enterprise Resource Planning Systems</td>
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<tr>
<td>CIS 4348</td>
<td>Data Communications and Network Architecture</td>
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<td>CIS 4349</td>
<td>Advanced Database Management Systems</td>
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<tr>
<td>CIS 4350</td>
<td>Ethical Hacking</td>
<td></td>
</tr>
<tr>
<td>CIS 4358</td>
<td>Network and Cloud Administration</td>
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<td>CIS 4360</td>
<td>Developing Business Solutions for the Enterprise</td>
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<td>CIS 4395</td>
<td>Independent Study in Computer Information Systems</td>
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<tr>
<td>CIS 4399</td>
<td>Computer Information Systems Internship</td>
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</table>

**Total Hours** 18

Students interested in pursuing the certificate program should contact the Chair of Computer Information Systems and Quantitative Methods, McCoy Hall 404 or visit the Department website at www.cis.txstate.edu (http://www.cis.txstate.edu).