1. Catalog Description of the Course.
IT 401 WEB INTELLIGENCE (3)
Three hours of lecture in the lab per week
Prerequisites: IT 402
Using web programming to extract information, using intelligent search engines, artificial intelligence techniques (expert systems, agents). Topics include: data mining, data warehousing, natural language processing, decision support systems, and intelligent agents.

2. Mode of Instruction.

<table>
<thead>
<tr>
<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Seminar</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Laboratory</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Activity</td>
<td>0</td>
<td>0</td>
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</tbody>
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Justification: BSIT elective.
Learning Objectives:
Students who successfully complete this course will:
1. Be able to design implement and test a basic web crawler.
2. Be able to organize data in a relational database structure.
3. Be able to design and implement a simple decision support system.
4. Be able to explain the web services concept.
5. Be able to analyze the functionality of an intelligent agent.
6. Be able to classify web software agents.
7. Be able to classify and analyze web knowledge sources.

4. Is this a General Education Course?
No.

5. Course Content in Outline Form.
Topics:
1. Natural Language Processing.
2. Java programming on the web.
3. WWW Search Engines.
5. Artificial Intelligence Concepts.
7. Database and Knowledge Representation Concepts.
8. Information Distribution.

6. Cross-listed Courses.
None.

7. References.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Year</th>
<th>ISBN</th>
</tr>
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<tbody>
<tr>
<td>3. Web Data Mining and Applications in Business Intelligence and Counter-Terrorism</td>
<td>Bhavani Thuraisingham</td>
<td>CRC Press</td>
<td>2003</td>
<td>0849314607</td>
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8. Faculty Qualified to Teach This Course.
Qualified Faculty: Smith, Wolfe

Projected semesters to be offered: Fall, Spring, Summer

10. New Resources Required.
a. New Equipment needs: Use of existing computer lab.
b. New Library needs: none
c. New Space/Facilities needs: none

11. Program Modifications.
None.

12. Proposer of Course.
Proposer: Smith, Wolfe  Date: 10/23/03