1. Catalog Description of the Course.
   **IT 424 COMPUTER SYSTEM SECURITY FOR IT (3)**
   Three hours of lecture per week
   Prerequisites: IT 429

2. Mode of Instruction.

<table>
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<tr>
<th>Units</th>
<th>Hours per Unit</th>
<th>Benchmark Enrollment</th>
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<td>Lecture</td>
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<td>1</td>
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<tr>
<td>Seminar</td>
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<td>Laboratory</td>
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<td>0</td>
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<tr>
<td>Activity</td>
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   Justification: BSIT elective.
   Learning Objectives:
   Student who successfully complete this course will:
   1. Be able to list the layers in the OSI Security Architecture.
   2. Be able to explain the Symmetric Cipher Model.
   3. Be able to explain the Data Encryption Standard (DES).
   4. Be able to explain the Public-Key encryption method.
   5. Be able to describe the fundamental concept behind the RSA algorithm.
   6. Be able to explain simple Message Authentication methods.
   7. Be able to explain basic Mail security methods.
   8. Be able to explain the IP security architecture.
   9. Be able to explain basic web security techniques.

4. Is this a General Education Course?
   No.

5. Course Content in Outline Form.
   Topics:
   2. The OSI Security Architecture.
   4. Block Ciphers.
   5. Data Encryption Standards.
   6. Finite Fields.
   7. Symmetric Ciphers.
   9. Public-Key Cryptography and RSA.
   13. Web security.
   14. Firewalls.

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>1. Secure Electronic commerce</td>
<td>Warwick Ford, Michael Baum</td>
<td>Prentice Hall</td>
<td>2001</td>
<td>0130272760</td>
</tr>
<tr>
<td>2. Hacking for Dummies</td>
<td>Kevin Beaver</td>
<td>Wiley</td>
<td>2004</td>
<td>076455784x</td>
</tr>
</tbody>
</table>

8. Faculty Qualified to Teach This Course.
   Qualified Faculty: Smith,Wolfe

   Projected semesters to be offered: Fall, Spring

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: 7/13/2004