# Computer Science (PhD)

*Doctor of Philosophy in Computer Science (PhD)*

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Core Courses</strong></td>
<td></td>
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<tr>
<td></td>
<td>Select four courses - two from each category - within “Core Courses” listed below</td>
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<tr>
<td></td>
<td><strong>Required Courses</strong></td>
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<tr>
<td>CSC 600</td>
<td>Computer Science Graduate Orientation</td>
<td>3</td>
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<tr>
<td>CSC 890</td>
<td>Doctoral Preliminary Exam</td>
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<tr>
<td>CSC 700-level Courses (two or more)</td>
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<tr>
<td></td>
<td><strong>Elective / Research Courses</strong></td>
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<td></td>
<td>“Elective / Research Courses” are approved in conjunction with the academic committee</td>
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<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td>72</td>
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</table>

## Core Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Select four courses with two from each category</strong></td>
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<tr>
<td></td>
<td><strong>Theory Category</strong></td>
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<tr>
<td>CSC 503</td>
<td>Computational Applied Logic</td>
<td>3</td>
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<tr>
<td>CSC 505</td>
<td>Design and Analysis Of Algorithms</td>
<td>3</td>
<td></td>
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<tr>
<td>CSC 512</td>
<td>Compiler Construction</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CSC 514</td>
<td>Foundations of Cryptography</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CSC 565</td>
<td>Graph Theory</td>
<td>3</td>
<td></td>
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<tr>
<td>CSC 579</td>
<td>Introduction to Computer Performance Modeling</td>
<td>3</td>
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<tr>
<td>CSC 580</td>
<td>Numerical Analysis I</td>
<td>3</td>
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<tr>
<td>CSC 707</td>
<td>Automata, Languages and Computability Theory</td>
<td>3</td>
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<td></td>
<td><strong>Systems Category</strong></td>
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<tr>
<td>CSC 501</td>
<td>Operating Systems Principles</td>
<td>3</td>
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<td></td>
<td><strong>Total Hours</strong></td>
<td>72</td>
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</tbody>
</table>

## Faculty

**Department Head**
Gregory E. Rothermel, *Professor*

### Distinguished University Research Professor
Donald L. Bitzer

### Distinguished Professors
Tiffany M. Barnes
Mladen A. Vouk, *Vice Chancellor for Research Development*

### Distinguished University Professor
James C. Lester II, *Director of the Center for Educational Informatics*

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### Full Professor
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Rudra Dutta, Associate Department Head
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Sharma Vallin Thankachan
Benjamin A. Watson
Wujie Wen

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Shiyan Jiang
Jung-Eun Kim
Chin Ho Lee
Jiajia Li
Jianqing Liu
Xiaorui Liu
Yuchen Liu
John-Paul Ore
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Dominik Wermke
Bowen Xu
Chenhan Xu
Man Ki Yoon
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Chandrika Satyavolu
Jessica Y. Schmidt
David B. Sturgill
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Abida Haque
Caio Batista de Melo
Alexander Card
Ignacio X. Dominguez
Adam Gaweda
Shuyin Jiao
Sterling M. McLeod

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Margaret Heil, Director of Senior Design Center
ToniAnn Marini, Assistant Director of Undergraduate Advising

Research Professor
Franc Brglez

Assistant Research Professor
Bita Akram

Director
Leslie Rand-Pickett, Graduate Career Services

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Wu-show Chou
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Robert J. Fornaro
Thomas L. Honeycutt
David F. McAllister
Harry Perros
Douglas S. Reeves
Woodrow Robbins

Carla D. Savage
William J. Stewart
Alan L. Tharp
David J. Thuente

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Aldo Dagnino
Steven Hunter
Chris Martens
Wookhee Min
Peng Ning
Christopher Parnin
Injong Rhee
Robert St. Amant
Xiaogang (Cliff) Wang
Tao Xie