• 14 Chair and Named Professorships
• 26 NSF CAREER Awards
• 1 Presidential Early Career Award
• 5 ONR Young Investigator Awards
• 2 Army Young Investigator Awards
• 1 NASA Young Investigator Award
• Over 40 Fellows of professional societies
• 44 Editors of top journals
• Dedicated & professional staff
UG Applications:

SAT of 1293 (SOE)
Admit Rate of 41% (SOE)

1220 (UConn)
54% (UConn)
Women UG Students:
60% Growth (SOE)
29% (Nat’l)
Graduate Enrollment:

45% Growth (SOE)  21% (Nat’l)
SOE Contribution to UCONN

Outstanding Support from OSP

- Pharmacy: 5%
- Other: 8%
- CANR: 10%
- CLAS: 32%
- SOE: 40%
- NEAG: 5%

2010 Proposals
## Return on Investment

<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2011</th>
<th>Change</th>
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</thead>
<tbody>
<tr>
<td>UG Applications</td>
<td>1928</td>
<td>3810</td>
<td>98%</td>
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<tr>
<td>UG Students</td>
<td>1641</td>
<td>3810</td>
<td>22%</td>
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<tr>
<td>Women UG</td>
<td>217</td>
<td>382</td>
<td>76%</td>
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<tr>
<td>BS Degrees</td>
<td>266</td>
<td>430</td>
<td>62%</td>
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<tr>
<td>Grad Students</td>
<td>469</td>
<td>728</td>
<td>55%</td>
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<tr>
<td>Journal Articles</td>
<td>311</td>
<td>501</td>
<td>61%</td>
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<tr>
<td>Research Awards</td>
<td>$13.5M ('07)</td>
<td>$32.8M</td>
<td>143%</td>
</tr>
<tr>
<td>Research</td>
<td>$20.8M</td>
<td>$37.3M ('10)</td>
<td>80%</td>
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</tbody>
</table>
Meeting the Needs of our Students

- CQI through student feedback
- 57% of students interested in minors & concentrations
- 66% of students interested in UG Research
- 75% of students interested in internships/Co-Ops
- International activities
- K-12 & Community outreach
Personalized Education

- Minors & Concentrations
  - Environmental Engineering
  - Biomedical Engineering
  - Nanotechnology
  - Nanomaterials
  - Aerospace
  - Engineering Management
  - Materials Science
  - Power Engineering
  - Systems Engineering

- NSF Research Experiences for Undergraduates
  - Trustable Computing (Prof. Chandy)
  - Sustainable Energy (Profs. Murphy and Renfro)
<table>
<thead>
<tr>
<th>Year</th>
<th>'02</th>
<th>'03</th>
<th>'04</th>
<th>'05</th>
<th>'06</th>
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<tbody>
<tr>
<td>Freshman</td>
<td>327</td>
<td>346</td>
<td>352</td>
<td>386</td>
<td>356</td>
</tr>
<tr>
<td>Fresh-Soph</td>
<td>255 (78%)</td>
<td>289 (84%)</td>
<td>312 (89%)</td>
<td>353 (91%)</td>
<td>317 (89%)</td>
</tr>
<tr>
<td>Soph-Junior</td>
<td>214 (84%)</td>
<td>245 (85%)</td>
<td>256 (82%)</td>
<td>296 (84%)</td>
<td>254 (80%)</td>
</tr>
<tr>
<td>Junior-Senior</td>
<td>197 (92%)</td>
<td>236 (96%)</td>
<td>229 (89%)</td>
<td>272 (92%)</td>
<td>237 (93%)</td>
</tr>
<tr>
<td>Grad in 4 years</td>
<td>73 (22%)</td>
<td>101 (29%)</td>
<td>113 (32%)</td>
<td>154 (40%)</td>
<td>137 (38%)</td>
</tr>
<tr>
<td>Grad in 6 years</td>
<td>5 (44%)</td>
<td>7 (53%)</td>
<td>9 (47%)</td>
<td>7 (59%)</td>
<td>59 (71%)</td>
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<tr>
<td></td>
<td>‘07</td>
<td>‘08</td>
<td>‘09</td>
<td>‘10</td>
<td>‘11</td>
</tr>
<tr>
<td>------------------</td>
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</tr>
<tr>
<td>Freshman</td>
<td>393</td>
<td>500</td>
<td>408</td>
<td>478</td>
<td>428</td>
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<tr>
<td>Fresh-Soph</td>
<td>341</td>
<td>451</td>
<td>355</td>
<td>469</td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(87%)</td>
<td>(90%)</td>
<td>(87%)</td>
<td>(98%)</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Soph-Junior</td>
<td>292</td>
<td>391</td>
<td>302</td>
<td></td>
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<tr>
<td></td>
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<tr>
<td>(86%)</td>
<td>(87%)</td>
<td>(85%)</td>
<td></td>
<td>NA</td>
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<tr>
<td>Junior-Senior</td>
<td>274</td>
<td>359</td>
<td>301</td>
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<td></td>
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<tr>
<td>(94%)</td>
<td>(92%)</td>
<td>(99%)</td>
<td></td>
<td>NA</td>
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<tr>
<td>Grad in 4 years</td>
<td>194</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
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<tr>
<td>(49%)</td>
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</table>
$3.3M Fellowship and Scholarship Grant
- Partnership between UConn and Tech High Schools
- PhD students will enhance their broader impact
- Teachers and students will learn through classroom & laboratory experience led by PhD students
Provides up to $30K in stipend and $13.5K in institutional allowances per student

6 new site programs provide $3.5M in fellowship support - **Largest # in the US**

- Computer security (John Chandy - ECE)
- Biomaterials (Mei Wei - CMBE)
- Biomedical Informatics/Underwater Networks (Reda Ammar - CSE)
- Cloud Computing (S. Rajasekaran – CSE)
- Sustainable Energy (M. Choi & A. Faghri)
<table>
<thead>
<tr>
<th>Department</th>
<th>Category</th>
<th>Public U. Rank</th>
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</thead>
<tbody>
<tr>
<td>CHEG</td>
<td>Student Outcomes</td>
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<td>CHEG</td>
<td>Academic Jobs</td>
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<td>MSE</td>
<td>Placement Rate</td>
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<tr>
<td>Civil</td>
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<td>EnvE</td>
<td>Diversity</td>
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<td>CSE</td>
<td>Female Faculty</td>
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<td>CSE</td>
<td>Quality Survey</td>
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<td>ECE</td>
<td>Awards</td>
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<td>ECE</td>
<td>Quality Survey</td>
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<tr>
<td>ME</td>
<td>Awards</td>
<td>5</td>
</tr>
<tr>
<td>ME</td>
<td>Publications</td>
<td>14</td>
</tr>
</tbody>
</table>
More than 8,000 COs in CT:
- Aerospace & Defense
- Bioscience & Biotechnology
- Chemicals
- Consumer Products
- Electrical & Electronics Equipment
- Sustainable Energy & Environment

Emphasis on:
- Advanced Manufacturing
- Materials
- Cyber-physical systems
- Analytics
Industry Partnerships: Foundations for Tech Park

- 70 R&D projects with industry
- 100 capstone senior design projects
- Joint proposals with industries
- 30 Associates partners at IMS
- P&W/H-S Centers of Excellence
- CIGNA On-Campus Internships
- GE Ecomagination Laboratories
- Sikorsky Innovation with SBIR
Foundational Technologies:

Application Agnostic

Multi-scale Modeling

High Performance Composites & Coatings

Sensor Networks

Additive Manufacturing
- C2E2, IMS & all departments
- 93 active energy projects
- $25M of grants in force
- FC and gasifier installations
Security, Sustainability & Infrastructure

- DHS Center of Excellence in Transportation Security
- USAID Ethiopian Institute for Water Resources
- NSA Center of Excellence for Information Assurance
- DoT University Transportation Center
- Smart Infrastructure & Analytics
- Data Fusion & Target Tracking
- Secure & Trustable Systems
- Hydrologic Modeling & Climate
- Advanced Hazards Mitigation
Strong research collaborations with SOM & SODM

BME program is a collaboration between SOE and UCHC
- 320 UG students
- 85 graduate students

Key strengths at JAXLAB:
- Computational Biology
- Genomics
- Cardiovascular
- Metabolic Science
Integration defines new field of "Convergence Engineering"

SoE strengths are in:
- Bio-informatics
- Bioimaging
- Biomaterials
- Biosensors
- Biomechanics
- Metabolic Engineering
- Systems Analysis
- Establish CT as a hub for Personalized Medicine
- Develop partnerships with industry to commercialize innovations
- Develop innovative curriculum that embraces Convergence Engineering
  - Research training
  - Internships/Co-Ops
Future Growth

- 160 faculty
  - Committed to education & outreach
  - Emphasis on sustainability, security, materials, manufacturing & bioengineering
- 2,700 UG students
  - Experiential Learning
  - Engagement activities
- 1,000 graduate students
  - Professional Development
  - Broader Impacts
- Modern Research & Teaching Facilities
New Engineering Building 2015