

**NC STATE UNIVERSITY**
COLLEGE OF ENGINEERING

bteec



**Center Update**
Gary Gilleskie, Ph.D.
Director, Operations

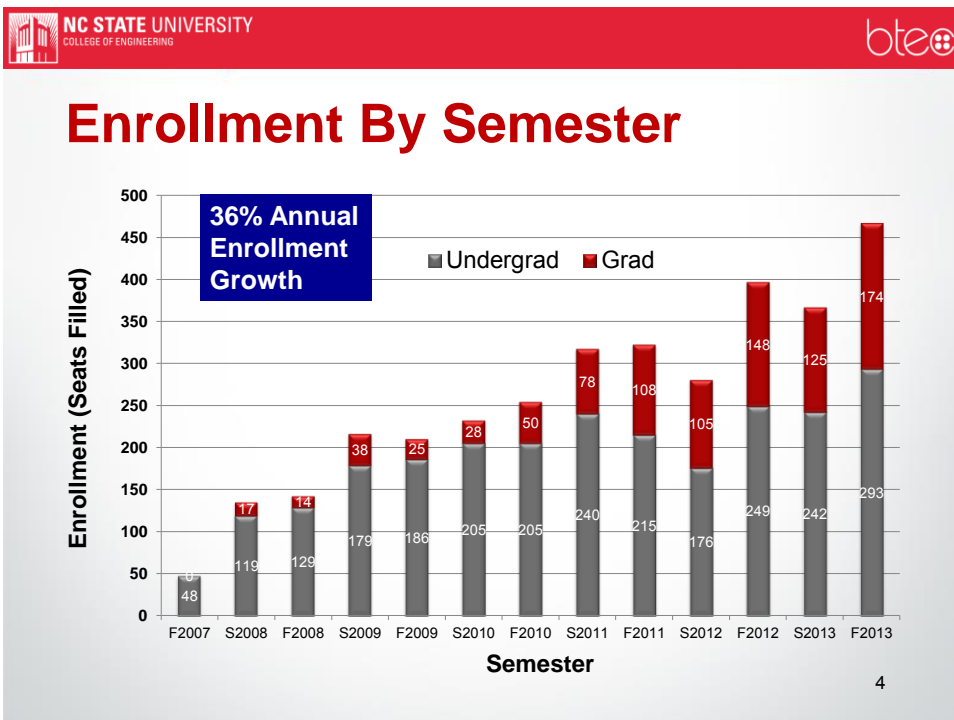
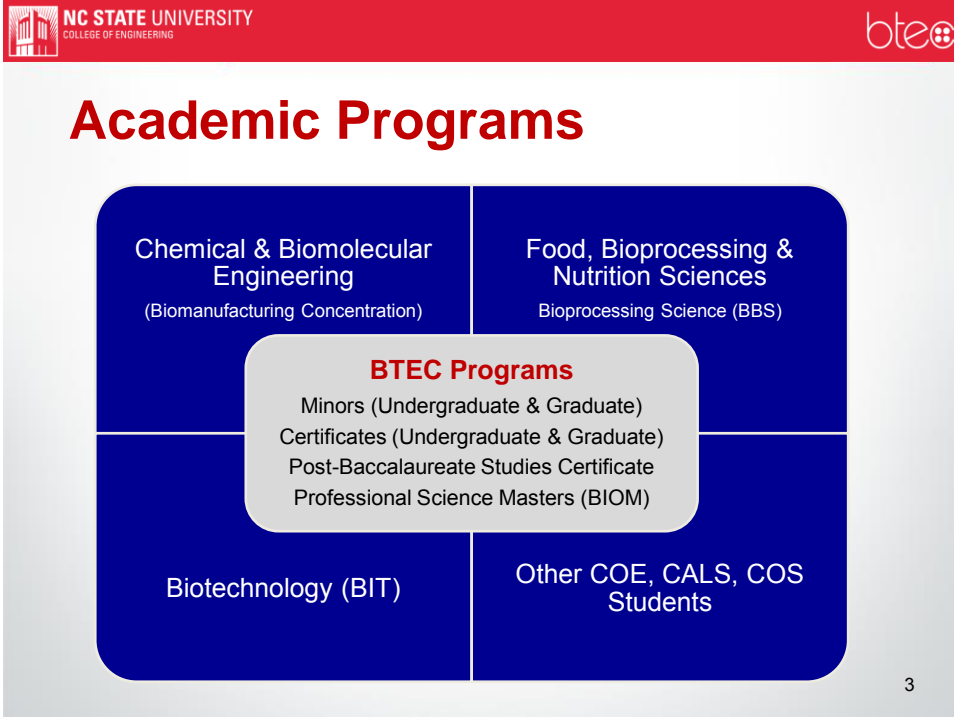
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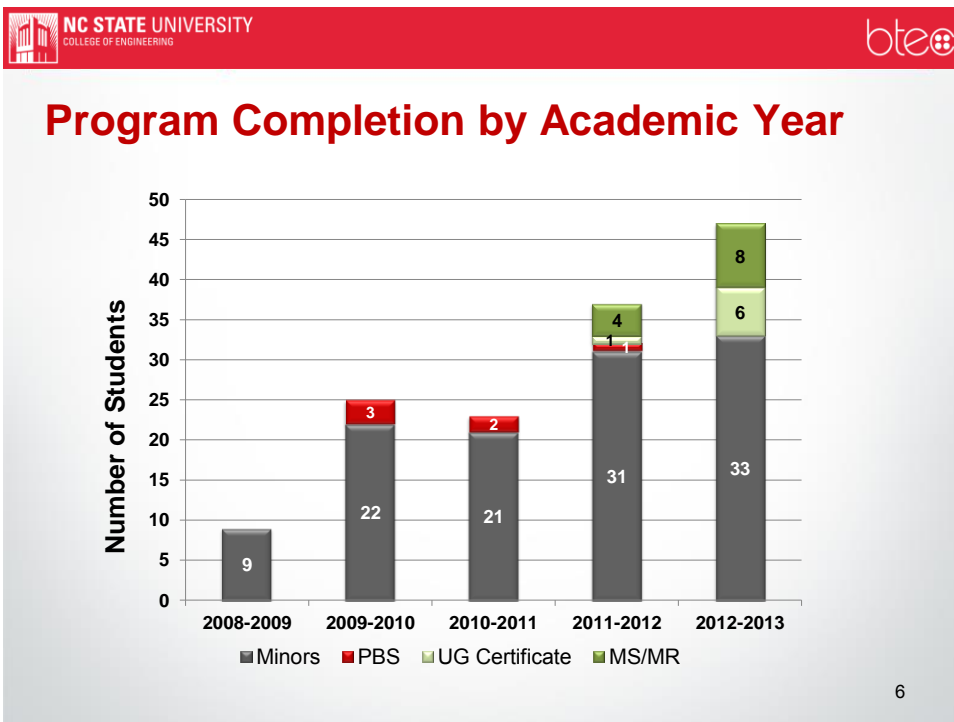
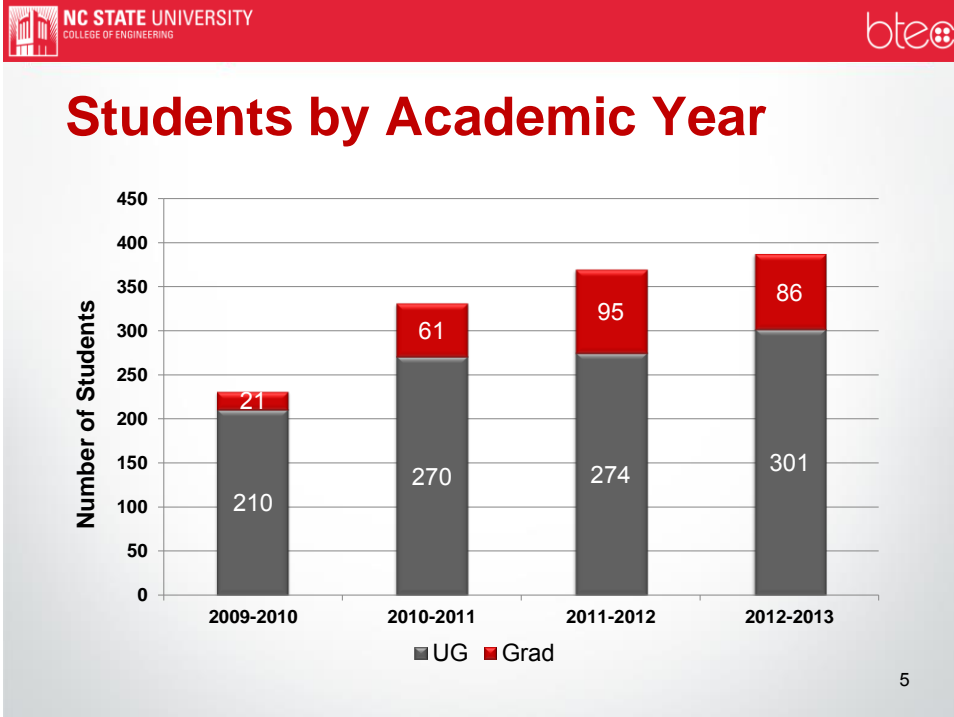
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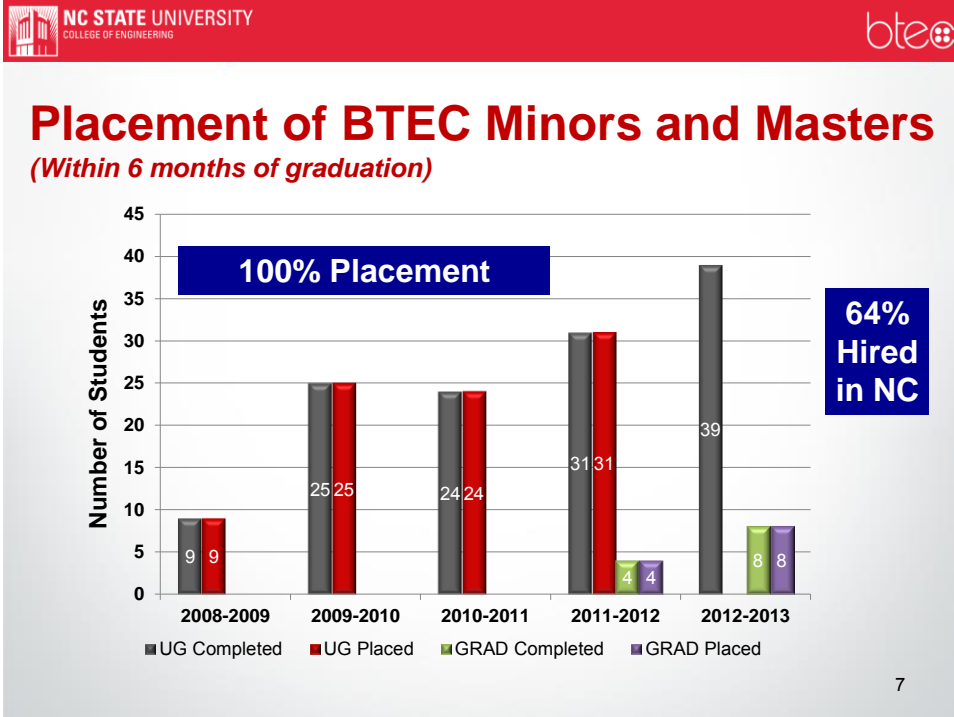
BTEC Vision

- **International leader in education and training in biomanufacturing involving cGMP production of high-value biological products.**
- **Serve as catalysts in establishing, attracting and expanding biomanufacturing facilities in North Carolina.**
- **International center of excellence for the development of next generation technologies for biomanufacturing.**

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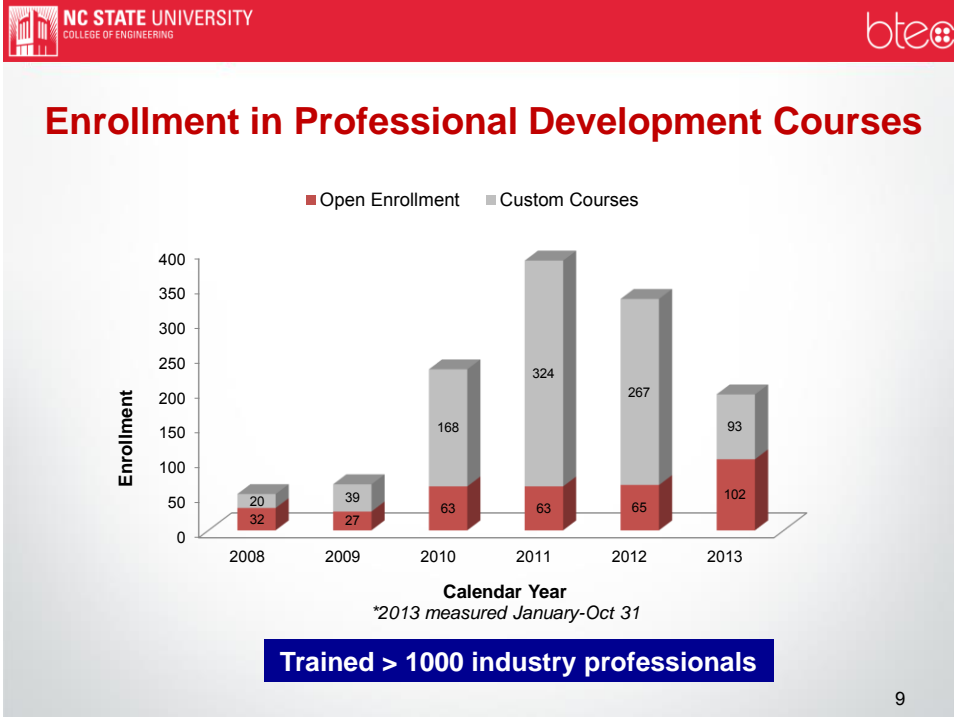
Professional Development Courses

Open-Enrollment Tracks

- Biomufacturing
- Bioprocess Development
- Bioprocess Engineering
- Analytical Technologies

Customized courses are also available

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BTEC Named a “2013 Top 20 Workforce Development Company” by TrainingIndustry.com

Based on...

- Industry visibility, innovation and impact
- Capability to develop and deliver customized corporate training services
- Depth and breadth of subject matter expertise
- Organization size and growth potential
- Quality of clients
- Geographic reach

TrainingIndustry.com

2013

Top Training Companies

Workforce Development

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Contract Training

- **US FDA** (since 2007)

Courses: Upstream Bioprocessing,
Downstream Bioprocessing,
QC/Analytical, Aseptic Processing

Trained 88 FDA Investigators to date



- **BARDA (HHS) - WHO** (since 2011)

Courses: Influenza Vaccine Manufacturing
(Fundamentals, Advanced, Regulators)

**Trained 138 vaccine specialists from
13 different countries and 12
regulators from 6 different countries**

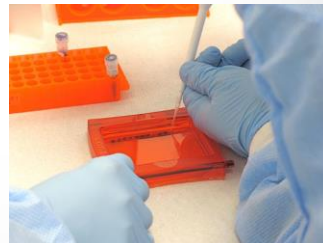


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Bioprocess and Analytical Services

BTEC offers:

- **Faculty with expertise** in biomanufacturing topics
- Staff with **hands-on biomanufacturing experience**
- **Facilities and equipment ideal** for this type of work
- **Flexibility** in the types of projects
 - “Risk-free environment”
 - Smaller projects that contract organizations not likely to take on



49 projects, 21 companies since 2009

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International Partners



Approved MOUs:

- University of Strasbourg (France)
- Shanghai Pharmaceutical School (China)
- Haimen Biotech & Medical Center (China)

Other Partnerships:

- IQS (Spain)
- Novartis/University of Pernambuco (Brazil)
- COBIK (Slovenia)

**bteco**
INTERNATIONAL
BIOMANUFACTURING TRAINING
& EDUCATION CENTERS

Founding Members:

- NC State - BTEC
- University of Strasbourg - EASE

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Thank You!

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