# COLLEGE OF ENGINEERING, COMPUTING AND APPLIED SCIENCES

CLEMSON UNIVERSITY

## **INNOVATION THROUGH TRANSLATION**

Clemson University's College of Engineering, Computing and Applied Sciences is transforming knowledge to have a high impact on society. We do this by nurturing a rich culture of diverse talent which drives the most successful enterprises. Faculty, staff and students are engaged in work and research that enhances economies and technologies that are proving to be global game changers.

Inspired by Thomas Green Clemson's dream to create a "high seminary of learning to benefit the agricultural and mechanical arts," engineering and sciences have been an integral part of the University's development. Since the first degrees were granted in 1896, Clemson engineers and scientists have made significant contributions to South Carolina, the nation and the world.

The college's strategic plan provides a coordinated strategy for success based on four goals:

- Leadership in integrated translational education
- Excellence in high-impact research through the creation and translation of new knowledge and technologies
- Economic development through translational research, innovation and education by integrating enterprise campuses
- Collaborative translation through innovative leadership, partnerships, engagement and experiences

## MISSION

The mission of our college is to educate, create and disseminate new knowledge, engage our students in critical thinking and thereby inspire new discoveries — the cuttingedge innovations of tomorrow, leading to transformative economic development and broadening our impact as a land-grant university.

## DEAN ANAND K. GRAMOPADHYE, PH.D.

As dean, Anand Gramopadhye oversees 12 academic departments that have an enrollment of nearly 6900 students. Under his leadership as department chair, the industrial engineering department increased in enrollment, research and scholarship. He helped create the Center for Workforce Development, which is home to the National Science Foundation Advanced Technical Education Center for Automotive



and Aviation Education. He received his B.S. in production engineering from the University of Bombay, India, and his M.S. and Ph.D. in industrial engineering from the State University of New York, Buffalo.

## **SPECIAL PROGRAMS**

- The Program for Educational Enrichment and Retention (PEER) pairs CECAS minority freshmen with minority upperclassmen who serve as mentors and guides in the transition to college.
- Residents in Science and Engineering (RISE) Living-Learning Community is a unique, first-year community for learning and student success.
- Women in Science and Engineering (WISE) encourages and supports women as they prepare for, obtain and succeed in careers in science and engineering.
- **Cooperative Education (Co-op) Program** provides students alternate semesters of academic study with paid, career-related semesters of employment.

### **DEPARTMENTS AND SCHOOLS**

The College of Engineering, Computing and Applied Sciences (CECAS) is made up of 12 schools and departments, but the unique structure of combining engineering and science programs within one college has led to an uncommon ability to provide a team-based, integrated approach to teaching and research. Scientists and engineers are working together to find more efficient solutions.

- Automotive Engineering
- Bioengineering
- Chemical and Biomolecular Engineering
- Glenn Department of Civil Engineering
- School of Computing
- Holcombe Department of Electrical and Computer Engineering
- Engineering and Science Education
- Environmental Engineering and Earth Sciences
- General Engineering
- Industrial Engineering
- Materials Science and Engineering
- Mechanical Engineering

#### **CENTERS OF ECONOMIC EXCELLENCE (NEW)**

CU-ICAR

The Clemson University International Center for Automotive Research (CU-ICAR) comprises four research thrust areas.

Automotive Systems and Integration

Automotive Manufacturing

Automotive Design and Development

Vehicle Electronic Systems Integration

- Advanced Fiber-based Materials
- CyberInstitute
- Optical Materials/Photonics
- Optoelectronics
- Supply Chain Optimization and Logistics
- Sustainable Development
- Urban Ecology and Restoration



#### ASSOCIATED CENTERS OF ECONOMIC EXCELLENCE (NEW)

- Advanced Tissue Biofabrication
- Health Facilities Design and Testing
- Regenerative Medicine
- SeniorSMART®

#### **CECAS ALUMNI**

The College of Engineering, Computing and Applied Sciences alumni play a critical role in supporting the college's drive to become one of the nation's top-20 public colleges in engineering. Alumni support student engagement, faculty advancement and academic opportunities that shape tomorrow's leaders.

CECAS alumni involvement:

- helps CECAS students receive a first-class educational experience that includes Creative Inquiry, collaborative learning, study abroad and career options;
- enables Clemson faculty, staff and students to address real-world problems facing communities, families and industry;
- increases the value of a Clemson degree for all alumni;
- and fosters creativity, critical thinking and economic development.

## **BY THE NUMBERS**

5,683

UNDERGRADUATE STUDENTS (Approx. 1/3 of university student population)

# 1,512 GRADUATE STUDENTS

(CECAS graduates more than 1/3 of university Ph.D.'s)

**223** FULL-TIME FACULTY (Approx. 1/4 of the university's T/TT faculty)