State of the Department

DR. RAMA CHELLAPPA, CHAIR

RESPONDING TO THE TECHNOLOGY NEEDS OF THE STATE, THE NATION, AND THE GLOBAL COMMUNITY











A. JAMES CLARK SCHOOL OF ENGINEERING

University News

- Budget situation
 - 2% merit raise in FY 17.
- Pat O'Shea moving on
- The Hotel construction and other apartment construction are coming along on route 1
- Irebe Center and Computer Science building groundbreaking done in Spring.



College News

- Graduating class largest class in Spring 16.
- Clark Hall coming up
- Add statistics from Bruk



ECE News - 1

- New grants in FY 15 went up by 30% (Show the excel spreadsheet)
- Undergraduate enrollment 996
- Confirmed entering freshmen about 121
- ENEE 101, a great hit!
- Graduate enrollment 600+
- ENEE 307 construction on going
- Prof. Chuck Silio's retirement
- Prof. Piya Pal going to UCSD



ECE News -2

- John Baras: Inducted into NAI and IHOF
- Sennur Ulukus: Distinguished Scholar-Teacher Award
- Behtash Babadi: NSF CAREER Award
- Mohammad Hafezi: SLOAN Fellowship



ECE News - 3

- Five alumni recognized with ECE Distinguishing Alumni award
- Mr. Ravitaja Vemulapalli recd. The second prize in collegelevel Ph.D. dissertation competition
- Undergraduate research fellowship sin TI, ViaSat and BAH
- Summer internships with Leidos
- Average salary of computer engineers: 90k



ECE news - 4

- Carrie Hilmer left
- Other staff changes
- EE at Southern Maryland
 - Will start in FY 17
- Mixed signals and embedded systems program at Shady Grove
 - FY 2019



Entering class

A total of 640 students are included on this roster. Average GPA: 4.44 ·

Combined Math/Critical Reading SAT Scores: Average: 1401; 25th Percentile: 1340; 75th Percentile: 1470

SAT Math Scores: Average: 730; 25th Percentile: 700; 75 Percentile: 770

SAT Critical Reading Scores: Average: 671; 25th Percentile: 620; 75th Percentile: 720

ACT Scores: Average: 32 ; 25th Percentile: 30; 75th Percentile: 34

404 (63%) of these students have been selected for the Honors College. Another 97 students (15%) are listed in College Park Scholars

Fall 2016 women and underrepresented racial/ethnic minorities (URMs) is as follows: 214 Women-33%; 110 URMs-17%

The updated number of confirmed students by major is as follows:

Engineering: Aerospace-88 Engineering: Bioengineering-124 Engineering: Chemical-41 Engineering: Civil-23 Engineering: Computer-80 Engineering: Electrical-46 Engineering: Fire Protection-7

Engineering: Materials Science-22

Engineering: Mechanical-98

Engineering: Undecided-111



Transfer students

165/173 will enroll in UMD. Female 24, male 141. URM: 45, not URM: 120.

The number of confirmed students by major on this roster is as follows:

- Engineering: Aerospace-10
- Engineering: Bioengineering-3
- Engineering: Chemical-17
- Engineering: Civil-19
- Engineering: Computer-16
- Engineering: Electrical-30
- Engineering: Fire Protection-2
- Engineering: Mechanical-68



Positive impact of differential tuition

New undergraduate course offerings in RF, operating systems, EM compatibility, embedded systems Hiring of instructors, TAs and UTFs Will be close to 580k/year additional income in FY 18



UG education

ENEE 101 – a great success

 Six to seven modules drawn from communications, feedback control, data hiding, brain signal interpretation, embedded systems, power,..

Courses on antenna design, RF circuits and EM compatibility

More involvement with companies

Integration of design ideas into curriculum

Minor in computer engg.

Certificate program in cybersecurity



Challenges

- Need to hire more faculty
 - Failed to hire in quantum computing, cyber security and real-time systems
- Space constraints
- Improving diversity
- Improve 5, 6-year graduation rates at undergraduate level.
- Reduce the time to graduation for Ph.D. students.

