Celebrating 100,000 Degrees

On May 9, 2014
We awarded our
100,000TH
ENGINEERING
DEGREE

Ammon Berrios ’14
Orange Grove, TX
College of Engineering

Largest college at Texas A&M

More than 15,000 students in 14 departments

Nationally Recognized Programs

Undergraduate Program*

Departments Ranked in Top 10*

Research Expenditures**

SOURCES

* 2015 U.S. News and World Report Rankings of Public Universities

**American Society for Engineering Education (2014 report)
College of Engineering Organizational Chart

M. Katherine Banks
Vice Chancellor and Dean of Engineering

N.K. Anand
Executive Associate Dean

Valerie Taylor
Senior Associate Dean for Academic Affairs

John E. Hurtado
Associate Dean for Academic Affairs

Prasad Enjeti
Associate Dean for Academic Affairs

Your assigned general engineering academic advisor

@tamuengineering | #TAMUengr
engineering.tamu.edu/easa
<table>
<thead>
<tr>
<th>Aerospace Engineering</th>
<th>Biological &amp; Agricultural Engineering*</th>
<th>Chemical Engineering</th>
<th>Biomedical Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering</td>
<td>Computer Engineering</td>
<td>Computer Science</td>
<td>Electrical Engineering</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Multidisciplinary Engineering Technology</td>
<td>Nuclear Engineering</td>
<td>Ocean Engineering</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Petroleum Engineering</td>
</tr>
</tbody>
</table>

*Administered by the College of Agriculture and Life Sciences

17 Majors

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engineering.tamu.edu/easa
<table>
<thead>
<tr>
<th>College of Engineering</th>
<th>Engineering Technology &amp; Industrial Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cybersecurity</td>
<td>• Embedded Systems Integration</td>
</tr>
<tr>
<td>• Engineering Project Management</td>
<td></td>
</tr>
<tr>
<td>Aerospace Engineering</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>Materials Science and Engineering</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>• Computer Science</td>
<td>• Analysis, Design and Management of Energy Conversion Systems</td>
</tr>
<tr>
<td>• Game Design and Development</td>
<td>• Control of Mechanical Systems</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>• Design and Simulation of Mechanical Systems</td>
</tr>
<tr>
<td></td>
<td>Nuclear Engineering</td>
</tr>
<tr>
<td></td>
<td>• Nuclear Engineering</td>
</tr>
<tr>
<td></td>
<td>• Radiological Health Engineering</td>
</tr>
<tr>
<td></td>
<td>Petroleum Engineering</td>
</tr>
</tbody>
</table>
Engineering Entry to a Major

- Engineering Entry to a Major
Entry to a Major (ETAM)

Eligibility

- Good Academic Standing
  - 2.0 CGPA for General Engineering / 2.5 CGPA for Engineering Academy
- Two Semesters of Course Work at TAMU or Academy Sites
  - Two Engineering, Two Science and Two Math Courses
- Based upon courses completed at the end of the semester in which students apply

Automatic Admit Opportunity

- 3.5 CGPA after two semesters, having completed required courses
- Only available during first opportunity

DID YOU KNOW?

99% of eligible General Engineering Students are in a major

97% of eligible General Engineering Students are in a major of their choice
Engineering Programs

- Engineering Honors Program
- 4+1 program: BS Engineering/MS Business
- Zachry Leadership Program
- Integrated Engineering / Law Degree
- Interdisciplinary BS Degree in Engineering

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Bring Your Own Device

• **Required** for new undergraduate students

• **Enhances** technology-mediated instruction

• Cost of device can be included with the cost of attendance for financial aid

• 2016-2017 recommended systems:
  • HP Zbook Studio G3
  • Lenovo ThinkPad P50 15.6”
  • Dell 15” New Precision 5510
  • Apple MacBook Pro 13”

engineering.tamu.edu/easa/byod
Bringing the Real World into the Classroom
The Aggie Engineering Experience

Knowledge Application
• Career Fair
• Certificates
• **Engineering Innovation Center**
  • Engineering Project Showcase
  • Internships
  • Student Design Competitions

Undergraduate Research
• AggiE_Challenge
• Engineering Honors
• Undergraduate Summer Research Grants

Global Communities
• Engineering Student Organizations
• International Programs
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• Undergraduate Summer Research Grants

Global Communities
• Engineering Student Organization: EWB
• International Programs
Engineering Study Abroad Programs

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Student Organizations

11 College-wide Student Organizations

• Aggies Communicate Through Engineering
• Engineers Without Borders
• Engineers Serving the Community
• National Society of Black Engineers
• Student Engineers’ Council
• Society for Asian Scientists and Engineers
• Society of Hispanic Professional Engineers
• Society of Mexican American Engineers & Scientists
• Society of Women Engineers
• Tau Beta Pi (Engineering Honor Society)
• Theta Tau (Co-ed Professional Engineering Fraternity)

Departmental Organizations

• More than 52 organizations in the departments
• All departments have an honor society and at least one professional society
Academics
Academic Advising

• **Know** your advisor

• Advisors provide **recommendations** and inform you of **rules** and **requirements**

• **Questions** during the semester? Contact your **advisor**!
Please use your HOWDY portal for your recommended schedule!

howdy.tamu.edu
First-Year Curriculum

All majors in the College of Engineering are required to complete the following first year courses:

• **ENGR 111** and **ENGR 112**
• **MATH 151** and **MATH 152**
• **PHYS 218, PHYS 208, and CHEM 107/117**

*Biomedical Engineering and Chemical Engineering have a two-semester chemistry sequence. Computer Science prefers students to have a two-semester chemistry, but will allow students to use CHEM 107/117 with CHEM 102/112 or another approved science.*
# Math Placement Exam

<table>
<thead>
<tr>
<th>MPE Score</th>
<th>MATH Course Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-33</td>
<td>Enroll in MATH 151 (Engineering Calculus I)</td>
</tr>
<tr>
<td>15-21</td>
<td>Enroll in MATH 150 (Pre-calculus and complete PPP)</td>
</tr>
<tr>
<td>≤14</td>
<td>Enroll in ENGR 289 (Algebra and Trigonometry)</td>
</tr>
</tbody>
</table>

Engineering Academy students will take the equivalent Math courses at Blinn-Bryan.
**Advanced Placement Scores - Calculus**

<table>
<thead>
<tr>
<th>Exam</th>
<th>Score</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus AB</td>
<td>4 or 5 and MPE score ≥ 22</td>
<td>Take MATH 151</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3 or 4 and MPE score ≥ 22</td>
<td>Take MATH 151</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>5 and MPE score ≥ 22</td>
<td>Take MATH 151 or MATH 152</td>
</tr>
</tbody>
</table>

Spring 2016 AP scores report to Texas A&M after July 1st and can be viewed in HOWDY.

Engineering Academy students will take the equivalent Math courses at Blinn-Bryan.
Math Placement Exam

MPE score has shown to be the best single predictor of performance in PHYS 218

**PHYS 218 Data – Fall 2012**

1796 students

<table>
<thead>
<tr>
<th>Grade</th>
<th>MPE Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>29.8</td>
<td>2.6</td>
</tr>
<tr>
<td>B</td>
<td>28.1</td>
<td>3.3</td>
</tr>
<tr>
<td>C</td>
<td>26.8</td>
<td>3.8</td>
</tr>
<tr>
<td>D</td>
<td>26.3</td>
<td>4.0</td>
</tr>
<tr>
<td>F</td>
<td>24.7</td>
<td>5.0</td>
</tr>
</tbody>
</table>
## Advanced Placement Scores - Physics

<table>
<thead>
<tr>
<th>Exam</th>
<th>Score</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics C - Mechanics</td>
<td>5</td>
<td>Accept credit for PHYS 218 (only <em>after</em> completion of MATH 151)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Students interested in Mechanical Engineering are <strong>not encouraged</strong> to accept AP credit for PHYS 218</td>
</tr>
<tr>
<td>Physics C – Electricity and Magnetism</td>
<td>5</td>
<td>Accept credit for PHYS 208 (only <em>after</em> completion of MATH 151 &amp; PHYS 218)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Students interested in Electrical, Nuclear and Computer Engineering are <strong>not encouraged</strong> to accept AP credit for PHYS 208</td>
</tr>
</tbody>
</table>
Resources

Howdy ENGR 111/112 Help Sessions Supplemental Instruction Disability Services Peer Tutoring Academic Success Center Career Center Engineering Living Learning Community Undergraduate Catalog Course Schedule Texas A&M Student Rules Success Program Scholarships engineering.tamu.edu/easa
Strategies for Success

• Anticipate 3 hours of study per week for each credit hour – lost time cannot be regained

16 credits X 3 hrs. study = 48 hours of study PER WEEK

• Study in groups

• Ask for help, early
Distinguished Students

- Within a semester
  - Complete 15 credit hours
  - Earn grades of C or higher in all classes
  - Do not use any q-drops
  - Achieve a semester grade point ratio of at least 3.5

Dean’s Honor Roll
- Meet requirements above
- Achieve a semester grade point ratio of at least 3.75
Guiding Principles for Controlled Growth with Excellence

• Transform the educational experience to better prepare our students to engage in and meet the future needs of the engineering marketplace

• Increase accessibility to engineering education at all levels

• Deliver engineering education in a cost-effective manner
Teaching of 25 by 25

No engineering class larger than 100 students
“The professors of practice have contributed greatly to the learning experience of the students. They bring a real world, professional view to the classroom.”

Melinda McClure ’15
Chemical Engineering
Former President, Student Engineers Council
<table>
<thead>
<tr>
<th>Time</th>
<th>Student Agenda</th>
<th>Family Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 a.m. – 11:00 a.m.</td>
<td>Group Advising with your Academic Advisor</td>
<td></td>
</tr>
<tr>
<td>11:00 a.m. – 1:00 p.m.</td>
<td>Lunch and Student/Family Schedule Building</td>
<td></td>
</tr>
<tr>
<td>*1:00 p.m. – 5:00 p.m.</td>
<td>Schedule Building &amp; Registration</td>
<td>Q&amp;A with Academic Dean &amp; Faculty Panel</td>
</tr>
<tr>
<td></td>
<td>*Please see advising ticket for location.</td>
<td>*Please see your schedule for start time and location.</td>
</tr>
</tbody>
</table>
The **Engineering Ambassadors** are ready to help!
Thanks and Gig ‘em!

Questions?

Engineering Academic and Student Affairs
Engineering Activities Building B
979.845.7200
Email: easa@tamu.edu

engineering.tamu.edu/easa