

FEB 22 17

**Approval Chart for Curriculum Changes**A = Approve    I = Information Item<sup>1</sup>    R = Advise & Respond<sup>2</sup>

Course Number ENGR 281 or Degree Plan(s) Bachelor of Science in Engineering  
 State the requested change and reason. A memo may be attached if more space is necessary.

ENGR 281 was added as a new course to replace ENGR 481 to better meet the needs of engineering students. The new course application is included in the submissions to the councils.

*This change will be retroactive for all active catalogues.  
 - per New Course application, item #26*

Circle the number that corresponds to the requested change. Degree plan changes are on the second page.

|     |                                                                                                                   | COUNCIL <sup>3</sup> |                  |       |     |      |      |      |         |           |
|-----|-------------------------------------------------------------------------------------------------------------------|----------------------|------------------|-------|-----|------|------|------|---------|-----------|
|     | Change to a Course                                                                                                | Dept./School         | College Academic | Deans | TEC | UGEC | UUAC | GRAD | Provost | President |
| 1.  | Title (description unchanged)                                                                                     | A                    | A                | A     | I   |      |      |      | I       | I         |
| 2.  | Description (not affecting content)                                                                               | A                    | A                | A     | I   |      |      |      | I       | I         |
| 3.  | Content (substantive change)                                                                                      | A                    | A                | A     | I   |      |      |      | A       | A         |
| 4.  | Number of hours (lecture, lab, contact)                                                                           | A                    | A                | A     | A   |      |      |      | A       | A         |
| 5.  | Course number within the hundred                                                                                  | A                    | A                | I     | I   |      |      |      | I       | I         |
| 6.  | Course number beyond the hundred                                                                                  | A                    | A                | A     | A   |      |      |      | A       | A         |
| 7.  | Prerequisites                                                                                                     | A                    | A                | A     | I   |      |      |      | I       | I         |
| 8.  | Course fee(s)                                                                                                     | A                    | --               | A     | --  |      |      |      | A       | I         |
| 9.  | From U to G <i>or</i> G to U                                                                                      | A                    | A                | A     | A   |      |      |      | A       | A         |
| 10. | Cross list with another department: U or G level                                                                  | A                    | A                | A     | A   |      |      |      | A       | A         |
| 11. | Department of record                                                                                              | A                    | A                | A     | A   |      |      |      | A       | A         |
| 12. | Open or close a course                                                                                            | A                    | A                | A     | A   |      |      |      | A       | A         |
| 13. | New course — See website for application and process.<br>This change includes combining or splitting a course(s). | A                    | A                | A     | A   |      |      |      | A       | A         |

Note: When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

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|                         |                                                                                                             | COUNCIL <sup>3</sup> |                  |       |     |      |      |      | Board of Trustees |
|-------------------------|-------------------------------------------------------------------------------------------------------------|----------------------|------------------|-------|-----|------|------|------|-------------------|
| Change to a Degree Plan |                                                                                                             | Dept./School         | College Academic | Deans | TEC | UGEC | UUAC | GRAD |                   |
| 1.                      | University Requirements — Change in approved course content <sup>6</sup>                                    | A                    | A                | A     |     | A    |      |      | --                |
| 2.                      | University Requirements — Add or drop a required course from the University Requirements chart <sup>6</sup> | A                    | A                | A     |     | A    |      |      | --                |
| 3.                      | University Requirements — Add or drop a course from a menu within the University Requirements <sup>6</sup>  | A                    | --               | --    |     | A    |      |      | --                |
| 4.                      | University Requirements — Change hours within a menu on the University Requirements chart <sup>6</sup>      | A                    | A                | A     |     | A    |      |      | --                |
| 5.                      | Major — Revision of major <sup>4,5</sup>                                                                    | A                    | A                | A     |     | A    |      |      | --                |
| 6.                      | Major — Adopt or change admission requirements                                                              | A                    | A                | A     |     | A    |      |      | --                |
| 7.                      | Major — Add <sup>4,5</sup>                                                                                  | A                    | A                | A     |     | A    |      |      | 1                 |
| 8.                      | Major — Discontinue (proposed by the department or college)                                                 | A                    | A                | A     |     | A    |      |      | 1                 |
| 9.                      | Major — Discontinue (proposed by the Provost)                                                               | See below.           |                  |       |     |      |      |      |                   |
| 10.                     | GPA — Revise major or cumulative requirement                                                                | A                    | A                | A     |     | A    |      |      | --                |
| 11.                     | Minor — Revise course selection                                                                             | A                    | A                | A     |     | 1    |      |      | --                |
| 12.                     | Minor — Add                                                                                                 | A                    | A                | A     |     | A    |      |      | --                |
| 13.                     | Minor — Discontinue (proposed by the department or college)                                                 | A                    | A                | A     |     | A    |      |      | --                |
| 14.                     | Minor — Discontinue (proposed by the Provost)                                                               | See below.           |                  |       |     |      |      |      |                   |
| 15.                     | Degree — Add                                                                                                | A                    | A                | A     |     | A    |      |      | 1                 |
| 16.                     | Degree — Discontinue (proposed by the department or college)                                                | A                    | A                | A     |     | A    |      |      | 1                 |
| 17.                     | Degree — Discontinue (proposed by the Provost)                                                              | See below.           |                  |       |     |      |      |      |                   |
| 18.                     | Any change to a graduate degree program                                                                     | A                    | A                | A     |     | A    |      |      | --                |

|                         |                                                                | COUNCIL <sup>3</sup> |            |      |     |      |          |         | Board of Trustees |
|-------------------------|----------------------------------------------------------------|----------------------|------------|------|-----|------|----------|---------|-------------------|
| Provost-Proposed Change |                                                                | Provost              | Department | Dean | TEC | UUAC | Graduate | Faculty |                   |
| 1.                      | Major/Graduate Program — Discontinue (proposed by the Provost) | A                    | R          | R    |     | A    |          | A       | 1                 |
| 2.                      | Minor — Discontinue (proposed by the Provost)                  | A                    | R          | R    |     | A    |          | --      | --                |
| 3.                      | Degree — Discontinue (proposed by the Provost)                 | A                    | R          | R    |     | A    |          | A       | 1                 |

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| COUNCIL <sup>3</sup> |                                                                                                                              |              |                  |       |      |      |      |         |         |           |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|-------|------|------|------|---------|---------|-----------|
|                      | Change to the Catalog Information                                                                                            | Dept./School | College Academic | Deans | UGEC | UUAC | GRAD | Provost | Faculty | President |
| 1.                   | General requirements for graduation including course requirements that are common to all majors for all degrees <sup>7</sup> | --           | --               | --    | A    |      |      | A       | A       | A         |
| 2.                   | Admission requirements                                                                                                       | --           | --               | --    | A    |      |      | A       | A       | A         |
| 3.                   | Policies governing academic probation and suspension                                                                         | --           | --               | --    | A    |      |      | A       | A       | A         |
| 4.                   | Requirements for graduating with honors                                                                                      | --           | --               | --    | A    |      |      | A       | A       | A         |
|                      |                                                                                                                              |              |                  |       |      |      |      |         |         |           |
| 5.                   | Other academic policy changes                                                                                                | --           | --               | --    | A    |      |      | A       | --      | A         |

<sup>1</sup> Councils may request additional information about "Information" items. These items are approved as "Consent Agenda."

<sup>2</sup> The Dean and Department should respond to the Provost's recommendation to close a program in writing. Advise & Respond (R) requires that the voting body should receive the written responses at least one week prior to the vote.

<sup>3</sup> All courses that meet University Requirements for general education must go through UGEC. Courses or degrees offered only to students seeking teacher certification must go through the Teacher Education Council. All undergraduate changes must go before the UUAC. All graduate degree plan changes must go through the Graduate Council.

<sup>4</sup> A minimum of 30 hours is required for a major. A maximum is specified for each degree (e.g., BA, BS). The university minimum for elective hours is 6, unless the requirements of external accrediting bodies make it impossible.

<sup>5</sup> Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

<sup>6</sup> Courses that satisfy ACU's University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and "not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession" (SACS 2.7.3). Departments may request exceptions to the first three criteria.

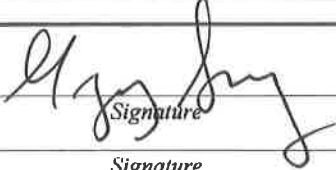
<sup>7</sup> The UUAC approved the clarification that "general requirements for graduation" means the enumerated items in the "General Requirements for Bachelor's Degrees" section of the catalog.

Revised 1-29-16

### Curriculum/Catalog Changes Signature Page

|                                                                                                |                          |
|------------------------------------------------------------------------------------------------|--------------------------|
| <b>Department/School Chair(s)</b>                                                              |                          |
| <br>Signature | 2/20/17<br>Approval date |
| _____<br>Signature                                                                             | _____<br>Approval date   |

|                                                                                                |                         |
|------------------------------------------------------------------------------------------------|-------------------------|
| <b>College Academic Council(s)</b>                                                             |                         |
| <br>Signature | 3.3.17<br>Approval date |
| _____<br>Signature                                                                             | _____<br>Approval date  |

|                                                                                                |                         |
|------------------------------------------------------------------------------------------------|-------------------------|
| <b>Dean(s)</b>                                                                                 |                         |
| <br>Signature | 3/7/17<br>Approval date |
| _____<br>Signature                                                                             | _____<br>Approval date  |

|                                  |                        |
|----------------------------------|------------------------|
| <b>Teacher Education Council</b> |                        |
| _____<br>Chair's signature       | _____<br>Approval date |

|                                  |                        |
|----------------------------------|------------------------|
| <b>General Education Council</b> |                        |
| _____<br>Chair's signature       | _____<br>Approval date |

|                                       |                        |
|---------------------------------------|------------------------|
| <b>Undergraduate Academic Council</b> |                        |
| _____<br>Chair's signature            | _____<br>Approval date |

|                            |                        |
|----------------------------|------------------------|
| <b>Graduate Council</b>    |                        |
| _____<br>Chair's signature | _____<br>Approval date |

|                    |                        |
|--------------------|------------------------|
| <b>Provost</b>     |                        |
| _____<br>Signature | _____<br>Approval date |

|                                  |                        |
|----------------------------------|------------------------|
| <b>Faculty</b>                   |                        |
| _____<br>Chair of faculty senate | _____<br>Approval date |

|                    |                        |
|--------------------|------------------------|
| <b>President</b>   |                        |
| _____<br>Signature | _____<br>Approval date |

## ENGINEERING (BSE)

| UNIVERSITY REQUIREMENTS                                                                                                |                  |
|------------------------------------------------------------------------------------------------------------------------|------------------|
| Please see the University Requirements section of this catalog (page 39).                                              |                  |
| MAJOR REQUIREMENTS                                                                                                     |                  |
| <b>Chemistry</b>                                                                                                       |                  |
| CHEM 133/131 General Chemistry I with Lab                                                                              | 4                |
| <b>Engineering</b>                                                                                                     |                  |
| ENGR 115 Introduction to Engineering and Physics                                                                       | 2                |
| ENGR 116 Introduction to Engineering and Physics Lab                                                                   | 1                |
| ENGR 131 Computer Aided Design and Modeling                                                                            | 3                |
| ENGR 135 Introduction to Electric Circuits                                                                             | 3                |
| ENGR 136 Introduction to Electric Circuits Lab                                                                         | 1                |
| ENGR 220 Engineering Mechanics: Statics                                                                                | 3                |
| ENGR 222 Engineering Mechanics: Dynamics                                                                               | 3                |
| <del>ENGR 281 Thermodynamics I</del>                                                                                   | <del>3</del>     |
| ENGR 305 Environmental and Health Safety                                                                               | 2                |
| ENGR 306 Engineering Ethics                                                                                            | 1                |
| ENGR 333 Fluid Mechanics                                                                                               | 3                |
| ENGR 342 Measurement Techniques                                                                                        | 3                |
| ENGR 343 Measurement Techniques Lab                                                                                    | 1                |
| ENGR 350 Engineering Economics                                                                                         | (3) <sup>1</sup> |
| ENGR 390 Junior Clinic                                                                                                 | 3                |
| ENGR 430 Senior Clinic I (capstone course)                                                                             | 3                |
| ENGR 432 Senior Clinic II (capstone & writing-intensive course)                                                        | 3                |
| <del>ENGR 481 Thermodynamics</del>                                                                                     | <del>3</del>     |
| <b>Engineering Electives</b>                                                                                           |                  |
| Selected in consultation with advisor                                                                                  | 14               |
| <b>Mathematics</b>                                                                                                     |                  |
| MATH 185 Calculus I                                                                                                    | (3) <sup>1</sup> |
| MATH 186 Calculus II                                                                                                   | 3                |
| MATH 286 Calculus III                                                                                                  | 3                |
| MATH 361 Ordinary Differential Equations                                                                               | 3                |
| <b>Math/Science Selections</b>                                                                                         |                  |
| Choose 4 hours from the following                                                                                      | 4                |
| MATH <del>187</del> , 325, 341, 377, 463; BIOL 112 or above (excluding 203);                                           |                  |
| CHEM 114 or above (excluding 203); PHYS above 331 (excluding 335/336, 342/343, 379, 388, and 401)                      |                  |
| <b>Philosophy</b>                                                                                                      |                  |
| PHIL 379 Philosophy, Religion, and Science                                                                             | (3) <sup>1</sup> |
| <b>Physics</b>                                                                                                         |                  |
| PHYS 220 Engineering Physics I                                                                                         | (3) <sup>1</sup> |
| PHYS 221 Engineering Physics I Lab                                                                                     | 1                |
| PHYS 222 Engineering Physics II                                                                                        | (3) <sup>1</sup> |
| PHYS 223 Engineering Physics II Lab                                                                                    | 1                |
| PHYS 330 Modern Physics                                                                                                | (3) <sup>1</sup> |
| PHYS 331 Modern Physics Laboratory                                                                                     | 1                |
| <b>TOTAL</b>                                                                                                           | <b>72</b>        |
| <sup>1</sup> Hours (in parenthesis) may also fulfill university requirements and are not included in total major hours |                  |
| ELECTIVES                                                                                                              |                  |
| Minimum                                                                                                                | 0                |
| <b>TOTAL MAJOR HOURS</b>                                                                                               | <b>72</b>        |
| OTHER GRADUATION REQUIREMENTS                                                                                          |                  |
| Minimum grade for PHYS or ENGR                                                                                         | C                |
| Minimum GPA for graduation                                                                                             | 2.00             |
| Minimum advanced hours                                                                                                 | 33               |
| Minimum total hours                                                                                                    | 128              |
| <i>Courses numbered 0** do not count in minimum hours required for degree.</i>                                         |                  |