## Curriculum Guide for AS to BS Engineering Technology (Applied Systems Technology) at WCU

|  |                           |            |                 | Freshman                                | /First Year                   |                          |            |                 |                         |
|--|---------------------------|------------|-----------------|---|-------------------------------|--------------------------|------------|-----------------|-------------------------|
| 1st Semester*                                  | Fall                      |            |                 |   | 2nd Semester                  | Spring                   |            |                 |                         |
|  |                           |            |                 |   |                               |                          |            |                 |                         |
| CC Course                                      | WCU Course<br>Equivalent  | LS<br>Cat. | Credit<br>Hours |   | CC Course                     | WCU Course<br>Equivalent | LS<br>Cat. | Credit<br>Hours | Required/Notes          |
| ENG 111  | ENGL 101                  | C1         | 3               |   | ENG 112                       | ENGL 202                 | C1         | 3               |                         |
| MAT 171  | MATH 130                  | C2         | 4               | Pre-Requisite for<br>MATH 146 if needed | COM 231 (Other<br>Hours)      | COMM 201                 | C3         | 3               |                         |
| Social/Behavioral<br>Sciences (Other<br>Hours) | History                   | Р3         | 3               |   | MAT 172                       | MATH 146                 |            | 4               | Required                |
| Humanities/Fine<br>Arts                        | Fine & Performing<br>Arts | P5         | 3               |   | Social/Behavioral<br>Sciences | Social Sciences          | P1         | 3               |                         |
| CHM 151  | CHEM 139                  | C5         | 4               | Required                                | CHM 152                       | CHEM 140                 |            | 4               | Not required for<br>WCU |
| ACA 122<br>Total Credit Hours                  | USI 130                   |            | 1<br>18         |   | Total Credit Hours            |                          |            | 17              |                         |

\* This is only meant to be a guide. See your academic advisor to develop your individual plan. Liberal studies (General Education) requirements will be waived for students transferring to WCU with the AS degree. A grade of C or above is required to obtain transfer credit at WCU.

## Sophomore/Second Year

| 3rd Semester           | Fall            |      |        |                       | 4th Semester       | Spring     |      |        |                       |
|------------------------|-----------------|------|--------|-----------------------|--------------------|------------|------|--------|-----------------------|
|                        |                 |      |        |                       |                    |            |      |        |                       |
|                        | WCU Course      | LS   | Credit |                       |                    | WCU Course | LS   | Credit |                       |
| CC Course              | Equivalent      | Cat. | Hours  | <b>Required/Notes</b> | CC Course          | Equivalent | Cat. | Hours  | <b>Required/Notes</b> |
| EGR 150 (Other         |                 |      |        |                       |                    |            |      |        |                       |
| Hours)                 | ENGR 199        |      | 2      | Required              | PHY 151            | PHYS 130   | C5   | 4      | Required              |
|                        |                 |      |        |                       |                    |            |      |        |                       |
| Social/Behavioral      |                 |      |        |                       | DFT 170 (Other     |            |      |        | Required (Instead     |
| Sciences               | Social Sciences | P1   | 3      |                       | Hours)             | ENGR 132   |      | 3      | of Wellness)          |
| Social Science (Global |                 |      |        |                       | Humanities/Fine    |            |      |        |                       |
| Perspective)           | World Cultures  | P6   | 3      |                       | Arts               | Humanities | P4   | 3      |                       |
| MAT 271 (Other         |                 |      |        |                       |                    |            |      |        |                       |
| Hours)                 | MATH 153        |      | 4      | Required              | MAT 252            | MATH 270   |      | 4      | Required              |
| Total Credit Hours     |                 |      | 12     |                       | Total Credit Hours |            |      | 14     |                       |

|  |   |                                     | Junior/Third Y     | 'ear (at WCU)   |   |  |       |
|--|---|-------------------------------------|--------------------|---|---|--|-------|
| 5th Semester   | Fall  |                                     |                    | 6th Semester  | Spring  |  |       |
|  |   |                                     |                    |   |   |  |       |
|  |   | Credit                              |                    |   |   | Credit                                   |       |
| WCU Course   | Course Title  | Hours                               | Notes              | WCU Course  | Course Title  | Hours                                    | Notes |
| ET 141   | Processes   | 3                                   |                    | ET 232  | Engineering Statics   | 3  |       |
| NGR 200  | Principles II   | 3                                   |                    | ENGR 350  | Principles III  | 3  |       |
| NGR 231  | 3-D Solid Modeling  | 3                                   |                    | ET 351  | Engineering Analysis  | 3  |       |
| ECET 301   | Electrical Systems  | 3                                   |                    | ET 310  | Modeling and Rapid  | 3  |       |
| ET 331   | Quality Systems   | 3                                   | Pre-req: MATH 270  | ENGR 352  | Heat Transfer   | 3  |       |
| ET 436   | Analysis  | 3                                   |                    | Technical Elective  | 211, MATH 255, or MATH  | 3  |       |
|  |   |                                     |                    |   |   |  |       |
| Total Credit Hours   |   | 18                                  | Senior/Fo          | Total Credit Hours  |   | 18                                       |       |
| Total Credit Hours<br>7th Semester                               | Fall  | 18                                  | Senior/Fo          |   | Spring  | 18                                       |       |
|  | Fall  |                                     | Senior/Fo          | ourth Year  | Spring  |  |       |
| 7th Semester   |   | Credit                              |                    | urth Year<br>8th Semester                                     |   | Credit                                   |       |
|  | Fall<br>Course Title  |                                     | Senior/Fo<br>Notes | ourth Year  | Spring<br>Course Title  |  | Notes |
| 7th Semester<br>WCU Course                                       |   | Credit                              |                    | urth Year<br>8th Semester                                     |   | Credit                                   | Notes |
| 7th Semester   | Course Title  | Credit<br>Hours                     |                    | urth Year<br>8th Semester<br>WCU Course                       | Course Title  | Credit<br>Hours                          | Notes |
| 7th Semester<br>WCU Course<br>ET 349                             | Course Title<br>Prototyping   | Credit<br>Hours<br>3                |                    | urth Year<br>8th Semester<br>WCU Course<br>ENGR 450           | Course Title<br>Engineering Capstone II   | Credit<br>Hours<br>3                     | Notes |
| 7th Semester<br>WCU Course<br>T 349<br>T 332                     | Course Title<br>Prototyping<br>Strengths of Materials   | Credit<br>Hours<br>3<br>3           |                    | urth Year<br>8th Semester<br>WCU Course<br>ENGR 450<br>ET 425 | Course Title<br>Engineering Capstone II<br>Engineering                              | Credit<br>Hours<br>3<br>3                | Notes |
| 7th Semester<br>WCU Course<br>T 349<br>T 332<br>T 333            | Course Title<br>Prototyping<br>Strengths of Materials<br>Strengths of Materials Lab                           | Credit<br>Hours<br>3<br>1           |                    | WCU Course<br>ENGR 450<br>ET 425<br>ET 334                    | Course Title<br>Engineering Capstone II<br>Engineering<br>Lean/Six Sigma            | Credit<br>Hours<br>3<br>3<br>3           | Notes |
| 7th Semester<br>WCU Course<br>T 349<br>T 332<br>T 333<br>NGR 400 | Course Title<br>Prototyping<br>Strengths of Materials<br>Strengths of Materials Lab<br>Engineering Capstone I | Credit<br>Hours<br>3<br>3<br>1<br>3 |                    | WCU Course<br>ENGR 450<br>ET 425<br>ET 334<br>ET 472          | Course Title<br>Engineering Capstone II<br>Engineering<br>Lean/Six Sigma<br>Systems | Credit<br>Hours<br>3<br>3<br>3<br>3<br>3 | Notes |

Total Credit Hours131Reminder: 30 hours of 300-400 level courses must be taken at WCU.

More information on B.S. Engineering Technology