1. Course: ENCP 101 - Introduction to Engineering
2. Credits and Contact Hours: 3 credits, 3 lecture hours per week
3. Instructor: Varies
4. Example Textbooks:

Landis, Raymond B. Studying Engineering: A Road Map to a Rewarding Career, 4th Edition. Discovery Press. (2013). ISBN 978-0-9793487-4-7.

Williams, Richard; Howard, William; Musto, Joseph. Engineering Computation: An Introduction Using MATLAB and Excel. McGraw-Hill Higher Education (2009). ISBN 978-0-07-338016-2.

1. Course Information
   1. Catalog Description: Engineering problem solving using computers and other engineering tools.
   2. Prerequisites: none.
   3. Substitute for AESP, BMEN, ECHE, ECIV, ELCT or EMCH 101
2. Course Goals
   1. Learning Outcomes. Students will be able to:
      1. Explain differences and similarities between various engineering disciplines.
      2. Calculate engineering quantities with different fundamental dimensions and units.
      3. Use Excel, MATLAB or similar applications to solve engineering-related problems.
      4. Apply the general steps of the engineering design process in an open-ended project.
      5. Prepare basic engineering reports containing text and graphics.
   2. Learning Outcomes (LOs) relation to ABET EAC Criterion 3 Student Outcomes

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| ABET EAC Criterion 3 Student Outcomes | LO1 | LO2 | L03 | L04 | LO5 |
| an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. | X | X | X | X | X |

1. Topics Covered

* Engineering student success
* Engineering disciplines
* Dimension and units
* Force and motion
* Voltage and current
* Work and energy
* Computer applications
* Engineering design process
* Graphing
* Report writing

1. Document History

Created April 6, 2022