



**BS Mechanical Engineering: alternate Introduction to Engineering and Introduction to Programming options - Sophomore year**

Updated July 27, 2022

**Notes about alternate "Intro to Engineering" course:** Any student who has not taken 530.111 Intro to MechE Design & CAD must learn SolidWorks and proper engineering drawing techniques on their own. Prof. Steven Marra will provide a training package. Students must also complete basic manufacturing training - laser cutter, 3D printing, and machine shop - before taking the course 530.254 Manufacturing Engineering. This training is available through WSE Manufacturing. Visit <https://wsemanufacturing.jhu.edu/submit-training-request/> for info on arranging training.

**Note about AP CS credit:** Students who scored a "5" on the AP Computer Science exam have the option to take either 1) One of the Gateway Computing courses, in which case their AP CS credits will be forfeited, or 2) A more advanced computing/programming course of at least 3-credits, which may be counted as a technical elective.

If the student has taken these in the Freshman year...				Take these in the Sophomore fall semester...				...and take these before graduating.			
500.101 What is Engineering or alternate "intro to engineering" course	171.101 Physics I and 173.111 Physics I Lab	Physics I AP credit	Intro to Programming course OR AP CS credit	530.111 Intro to MechE Design & CAD	530.115 MechE Freshman Lab I	171.101 Physics I	173.111 Physics I Lab	500.114 Gateway Computing: MATLAB	Advanced Programming Course	530.107 Undergrad MechE Seminar I	530.108 Undergrad MechE Seminar II
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