

MANUFACTURING ENG. (MANU)

MANU 2001 Design and Manufacturing (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/manu2001/>) **Legacy Code:** 301340

This subject will be offered at Engineering Innovation Hub - Hassall St, Parramatta campus. This subject introduces basic aspects of design and manufacturing, process selection, manufacturing processes, material selection based on material properties and the use of computers in the design process. A project selected allows students to work individually and in a team environment to achieve the final objective which is a workable product. As part of the project, students are asked to develop a product from a page of functional requirements by developing a concept sketch, material selection, detail engineering drawings, process plan and finally making the product in a workshop. At the end of the semester, the products are tested.

Level: Undergraduate Level 2 subject

Restrictions: Please see the Subject Details page for any restrictions for this subject

MANU 3003 Creative Digital: Robots and Avatars (10 Credit Points)

Subject Details (<https://hbook.westernsydney.edu.au/subject-details/manu3003/>) **Legacy Code:** 301307

This is a project-based learning subject that assists students to creatively synthesise skills learned in previous subjects. Students are introduced to current problem solving in professional practice that negotiates between physical and digital components to form smart artefacts. That relation is represented with the development of an interactive robot and its digital mirror counterpart as its avatar. The subject also assists in the preparation of a professional portfolio show piece for job applications in the industry. Learning by experimentation, the subject links traditional skillsets including software and 3D printing with new forms of design, from engineering narratives to digital creativity within augmented and virtual environments.

Level: Undergraduate Level 3 subject

Equivalent Subjects: MANU 3001 - Graphics 5 Creative Computing

Restrictions: Please see the Subject Details page for any restrictions for this subject