MANUFACTURING ENG. (MANU)

MANU 2001 Design and Manufacturing (10 Credit Points)
Subject Details **(**https://hbook.westernsydney.edu.au/
archives/2021-2022/subject-details/manu2001/**) Legacy Code:**
301340
This unit will be offered at Engineering Innovation Hub - Hassall St,
Parramatta campus. This unit 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/
archives/2021-2022/subject-details/manu3003/**) Legacy Code:**
301307
This is a project-based learning unit that assists students to creatively
synthesise skills learned in previous units. 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 unit also assists in the
preparation of a professional portfolio show piece for job applications
in the industry. Learning by experimentation, the unit 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