

Bio-production Engineering Stream

Students who follow the Bio-production Engineering stream use science and technology to create systems and machines for the production of crops, livestock, and biomass. Students learn about machine systems design, robotics, GIS, buildings and structures, complex systems, instrumentation and controls, and precision agriculture.

Students wishing to specialize in this stream should take five from the following complementary set D courses.

- BREE 217 Hydrology and Water Resources
- BREE 314 Agri-Food Buildings
- BREE 315 Design of Machines^A
- BREE 329 Precision Agriculture
- BREE 412 Machinery Systems Engineering
- BREE 423 Biological Material Properties

The six remaining complementary set D courses should be chosen from the following list.

- BREE 501 Simulation and Modelling
- BREE 504 Instrumentation and Control
- BREE 518 Ecological Engineering
- BREE 520 Food, Fibre and Fuel Elements
- BREE 529 GIS for Natural Resource Management
- BREE 531 Post-Harvest Drying
- BREE 532 Post-Harvest Storage

^A From 2019-2020 onwards, BREE 315 has been replaced by the required course BREE 415.