

Course Title: **Food Process Engineering**

Course Code: **FOOD604**

Descriptor Start Date: **15/07/2024**

POINTS: **15.00**

LEVEL: **6**

PREREQUISITE/S: **FOOD503**

COREQUISITE/S:

RESTRICTION/S:

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

An overview of process engineering: the application of the principles of measurement, heat transfer, fluid flow, materials handling and process engineering in the chemical and food industries.

LEARNING OUTCOMES

1. Perform basic calculation in mass and energy transfer and fluid mechanics.
2. Demonstrate understanding of thermodynamics, process cooling and food processing.
3. Describe suitable unit operations to support a food or chemical processing system.
4. Demonstrate safe practice.

CONTENT

- Mass and energy balance with basic calculations
- Thermodynamics and process cooling
- Fluid mechanics
- Particulate technology
- Selected equipment for: transport and storage, mixing, separation and purification of materials
- Food products sourced from Aotearoa New Zealand

LEARNING & TEACHING STRATEGIES

Disclaimer: Course descriptors may be amended between teaching periods/semesters

This course will be offered as a combination of formal lectures, structured practical work and independent student study.

ASSESSMENT PLAN

Assessment Event	Learning Outcomes
Test 1 (90 min) 30%	LO1, LO2, LO3
Test 2 (90 min) 30%	LO1, LO2, LO3, LO4
Assignment (2000 words) 40%	LO1, LO2, LO3, LO4

Grade Map	MAP1
	A+ A A- Pass with Distinction
	B+ B B- Pass with Merit
	C+ C C- Pass
	D Fail

Overall requirement/s to pass the course:

Achievement of a minimum overall grade of C- is required to pass this course.

LEARNING RESOURCES

Zeki Berk (2013). *Food Process Engineering and Technology* (E-Book). School of Science (n.d.). *FOOD604 Laboratory Manual* Auckland University of Technology

For further information, contact: Te Ara Hauora A Putaiao - Faculty of Health & Environmental Science

Principal Programme:	HA1041, Bachelor of Science
Related Programme/s:	AK1041 Bachelor of Science AK3750 Diploma in Applied Science

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