

# The Degree of Bachelor of Product Design (BProdDesign – 360 points)

These regulations must be read in conjunction with the General Regulations for the University.

## 1. Version

- (a) These Regulations came into force on 1 January 2024.
- (b) This degree was first offered in 2018.

## 2. Variations

In exceptional circumstances the Amo Matua, Pūhanga | Executive Dean of Engineering or delegate may approve a personal programme of study which does not conform to these Regulations.

## 3. The structure of the qualification

To qualify for the Bachelor in Product Design, a student must:

- (a) Be credited with a minimum of 360 points towards the qualification.
- (b) Be credited with the courses listed in Schedule C to these Regulations.
- (c) Satisfy the requirements for at least one major as listed in Schedule S to these Regulations.
- (d) Be credited with
  - i. at least 225 points from courses above 100-level and
  - ii. at least 30 points above 100-level from Schedule V of the Bachelor of Commerce Regulations; and
  - iii. a further 45 points above 100-level, in addition to the courses required to satisfy clauses 3(b), 3(c) and 3(d) ii, from courses in the BE(Hons), BProdDesign, BSc, BSpC degree Regulations, including at least 15 points at 300-level; and
  - iv. at least 75 points from courses at 300-level.

## 4. Admission to the qualification

A student for the Bachelor of Product Design must, before enrolling, meet the Admission requirements for Te Whare Wānanga o Waitaha | University of Canterbury as laid out in the General Regulations.

## 5. Subjects

- (a) The Bachelor of Product Design is awarded with the following majors or minors as defined in Schedule S to these regulations:
  - i. Industrial Product Design; or
  - ii. Applied Immersive Game Design; and
  - iii. Chemical Formulation Design; and
  - iv. Digital Product Design.
- (b) Minors provided for in the General Credit Regulations can also be taken as part of the BProdDesign or associated conjoint degree.

## 6. Time limits

The qualification adheres to the General Regulations for the University with a time limit of 10 years.

## 7. Transfers of credit, substitutions and cross-credits

This qualification adheres to the Credit Recognition and Transfer Regulations, with no additional stipulations.

## 8. Progression

This qualification adheres to the General Regulations for the University, with no additional stipulations.

## 9. Honours, Distinction and Merit

Honours, Distinction and Merit are not awarded for this qualification.

## 10. Exit and Upgrade Pathways to other Qualifications

There are no exit qualifications for this degree.

## Schedule C: Compulsory Courses for the Degree of Bachelor of Product Design

For full course information, go to [www.canterbury.ac.nz/courses](http://www.canterbury.ac.nz/courses)

- (1) PROD110 Product Design Principles or ENGR101 Foundations of Engineering
- (2) PROD101 Product Design 1
- (3) MGMT100 Fundamentals of Management
- (4) MKTG100 Principles of Marketing
- (5) 15 points of MATH or EMTH courses at 100-level

## Schedule S: Subject Courses for the Degree of Bachelor of Product Design

### Hoahoa Hua Pakihi | Industrial Product Design

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#### Major

##### 100-level

Required:

- (1) PROD111; and
- (2) PROD112; and
- (3) PHYS111 or PHYS101

##### 200-level

Required:

- (1) PROD210; and
- (2) PROD211; and
- (3) PROD212; and
- (4) PROD213; and
- (5) PROD214

##### 300-level

Required:

- (1) PROD311, and
- (2) PROD313, and
- (3) PROD314

Note: students who have completed (ENME201 and ENME221) may be exempted from (PROD112 and PROD210).

#### Minor

A student intending to minor in Industrial Product Design must be credited with the following: At least 75 points from the 15-point courses in this Schedule, including at least 60 points in Industrial Product Design and at least 45 points at 200-level or above.

### Hoahoatanga Hanga Kēmu | Applied Immersive Game Design

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#### Major

##### 100-level

Required:

- (1) PROD121; and
- (2) COSC121 or COSC131; and
- (3) COSC122

**200-level**

Required:

- (1) SENG201; and
- (2) PROD221; and
- (3) PROD222; and
- (4) PROD223; and
- (5) PROD224

**300-level**

Required:

- (1) PROD321; and
- (2) PROD322; and
- (3) PROD323

**Minor**

A student intending to minor in Applied Immersive Game Design must be credited with the following: At least 75 points from the 15-point courses in this Schedule, including at least 60 points in Applied Immersive Game Design and at least 45 points at 200-level or above.

**Pūhanga Matū, Tukanga | Chemical Formulation Design**

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**Major****100-level**

Required:

- (1) PROD131; and
- (2) CHEM111

**200-level**

Required:

- (1) PROD230 ; and
- (2) PROD231 ; and
- (3) PROD232 ; and
- (4) PROD233 ; and
- (5) PROD234 ; and
- (6) PROD235

**300-level**

Required:

- (1) PROD331, and
- (2) PROD333, and
- (3) PROD334

**Minor**

A student intending to minor in Chemical Formulation Design must be credited with the following: At least 75 points from the 15-point courses in this Schedule, including at least 60 points in Chemical Formulation Design and at least 45 points at 200-level or above.

## Digital Product Design

### Major

#### 100-level

Required:

- (1) PROD151; and
- (2) COSC121 or COSC131; and
- (3) COSC122.

#### 200-level

Required:

- (1) INFO263
- (2) SENG201
- (3) PROD251
- (4) PROD252
- (5) PROD254.

#### 300-level

Required:

- (1) PROD351
- (2) PROD353
- (3) PROD354.

### Minor

A student intending to minor in Digital Product Design must be credited with the following: At least 75 points from the 15-point courses in this Schedule, including at least 60 points in Digital Product Design and at least 45 points at 200-level or above.

## Schedule V: Valid Courses for the Degree of Bachelor of Product Design

### Accounting and Information Systems

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
INFO263	Web Design and Development	15	S2	Campus	P: 30 points from (INFO123, INFO125, COSC121, COCI31, COSC122) R: INFO233

### Chemistry

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
BCHM253	Cell Biology I	15	S1	Campus	P: BIOL111 (BCHM111) or ENCH281. R: BIOL253 RP: 15 points of CHEM at 100-level EQ: BIOL253
CHEM111	Chemical Principles and Processes	15	S1	Campus	P: (1) NCEA: at least 14 credits NCEA Level 3 Chemistry, or (2) CIE: at least D grade in CIE AL Chemistry or A grade in CIE ASL Chemistry, or (3) IB: at least Grade 4 in IB HL Chemistry or Grade 6 in IB SL Chemistry, or (4) CHEM114, or at least B Grade in BRDG023 or TRNS006.
			S2	Campus	

CHEM112	Structure and Reactivity in Chemistry and Biochemistry	15	S2	Campus	P: (1) NCEA: at least 14 credits NCEA Level 3 Chemistry, or (2) CIE: at least D grade in CIE AL Chemistry or A grade in CIE ASL Chemistry, or (3) IB: at least Grade 4 in IB HL Chemistry or Grade 6 in IB SL Chemistry, or (4) CHEM114, or at least B Grade in BRDGo23 or TRNS006. R: BCHM112 EQ: BCHM112
CHEM212	Chemical Reactivity	15	S1	Campus	P: CHEM112 or BCHM112 or ENCH241 R: BCHM212 EQ: BCHM212
CHEM246	Introduction to Medicinal Chemistry	15	S2	Campus	P: CHEM212 or BCHM212
CHEM247	Analytical Chemistry	15	S1	Campus	P: CHEM 111 or CHEM 112 (BCHM 112)
CHEM281	Practical Chemistry	15	S1	Campus	P: 1. CHEM111 and CHEM112 (BCHM112) or 2. CHEM212 R: BCHM281

## Computer Science

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
COSCI21	Introduction to Computer Programming	15	S1	Campus	R: COSCI31
			S2	Campus	
COSCI22	Introduction to Computer Science	15	SU2	Campus	P: COSCI21 or COSCI31
			S2	Campus	
COSCI31	Introduction to Programming for Engineers	15	S1	Campus	P: 1) MATH101, or 2) NCEA 14 Credits (18 strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems (91579)'), or 3) Cambridge: D at A level or an A at AS level in Mathematics, or 4) IB: 4 at HL or 5 at SL in Mathematics, or 5) approval of the Head of Department based on alternative prior learning. R: COSCI21
			S2	Campus	
COSC262	Algorithms	15	S1	Campus	P: (1) COSCI21 or COSCI31; (2) COSCI22; RP: MATH120
COSC363	Computer Graphics	15	S1	Campus	P: (1) ENCE260, (2) 30 points of 200-level Computer Science, (3) 15 points of 100-level MATH/STAT/EMTH (MATH120) recommended). MATH101 is not acceptable.
COSC367	Artificial Intelligence	15	S2	Campus	P: COSC262
COSC368	Human-Computer Interaction	15	S2	Campus	P: (1) COSCI21 or COSCI31; and (2) 30 points from COSC261, COSC262, COSC264, COSC265, ENCE260, SENG201; and (3) 15 points of MATH/EMTH/STAT/PSYC206 (excluding MATH101 and MATH110) RP: COSCI01
SENG201	Software Engineering I	15	S1	Campus	P: (1) COSCI21 or COSCI31; (2) COSCI22. Recommended preparation: 15 points from MATH, STAT or EMTH. MATH120/STAT101 are strongly recommended. RP: RP: 15 points from MATH, STAT or EMTH. MATH120/STAT101 are strongly recommended.
SENG301	Software Engineering II	15	S1	Campus	P: SEN201. RP: ENCE260 or COSC262.

## Digital Screen

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
DISC240	Animation Project I	15	S2	Campus	P: DISC241
DISC241	Foundations of Animation	15	S1	Campus	P: PROD142 and DISCI02
PROD142	2D and 3D Art for Game and Film	15	S2	Campus	
PROD241	Character Design	15	S1	Campus	P: PROD142
PROD243	World Building	15	S2	Campus	P: PROD142
PROD341	Cinematics and Visual Effects	15	NO		P: PROD243
PROD342	Digital Sculpting	15	NO		P: PROD241
PROD343	Rendering and Lighting	15	NO		P: PROD341

## Engineering

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
ENCN231	Solid Mechanics	15	S1	Campus	P: Subject to approval of the Dean of Engineering and Forestry R: ENCI230, ENCI234
ENGR101	Foundations of Engineering	15	S1	Campus	
			S2	Campus	
ENGR102	Engineering Mechanics	15	SU2	Campus	P: EMTH118 C: EMTH119, PHYS101
			S2	Campus	
			S2	Distance Learning	
ENME201	Design Communication	15	S1	Campus	P: ENGR101 Foundations of Engineering and Deans approval
ENME221	Engineering Design and Manufacture	15	S2	Campus	P: ENME201 or 2nd Year Director of Studies Approval
ENME301	Engineering Design and Production Management	15	S1	Campus	P: ENME201; ENME202; ENME221
ENME351	Biomedical Engineering Design	15	S2	Campus	P: ENME301 R: ENME311, ENME362

## Management

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
MGMT100	Fundamentals of Management	15	S1	Campus	R: MGMT101
			S2	Campus	
MGMT206	Organisational Behaviour	15	S1	Campus	P: (1) MGMT100; and (2) A further 45 points R: MGMT201, MGMT216 EQ: MGMT216
MGMT207	Principles of Human Resource Management	15	S1	Campus	P: (1) MGMT100; and (2) A further 45 points
MGMT221	International Business	15	S1	Campus	P: (1) MGMT 100; and (2) A further 45 points R: MGMT220
MGMT223	Innovation Management	15	S2	Campus	P: (1) MGMT 100; and (2) A further 45 points
MGMT230	Business, Society and the Environment	15	S1	Campus	P: 60 points R: MKTG230 EQ: MKTG230
			S2	Campus	

MGMT270	Introduction to Operations and Supply Chain Management	15	S1	Campus	P: (1) MGMT100 or MGMT170; and (2) STAT101 R: MSC1270, MSC1220 EQ: MSC1270
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## Marketing

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
MKTG100	Principles of Marketing	15	S1	Campus	R: MGMT102
			S2	Campus	EQ: MGMT102
MKTG204	Consumer Behaviour	15	S2	Campus	P: (1) MKTG100 or COMS104; and (2) A further 45 points. R: MGMT204 EQ: MGMT204
MKTG230	Business, Society and the Environment	15	S1	Campus	P: Any 60 points
			S2	Campus	R: MGMT230 EQ: MGMT230
MKTG240	Tourism, Hospitality & Events Management	15	S1	Campus	P: MKTG100
MKTG316	Digital Marketing	15	S2	Campus	P: (1) MKTG100, (2) A further 45 points at 200-level or above

## Innovation and Business

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
BSNS201	Business and Culture	15	S1	Campus	P: Any 60 points.
			S2	Campus	RP: ACCT102, ECON104, MGMT100
INOV200	Opportunities: Here, There and Everywhere	15	S1	Campus	P: Any 60 points
INOV201	Will it Fly?: Feasibility Assessment of New Innovation	15	S2	Campus	P: Any 60 points. RP: INOV200
INOV290	Enterprise in Practice (Project)	15	S2	Campus	P: 120 points at 100-level or above R: BSNS290

## Mathematics

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
EMTH118	Engineering Mathematics 1A	15	S1	Campus	P: 1) TRNS017 or MATH101, or 2) NCEA 14 Credits (18 strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems (91579)'), or 3) Cambridge: D at A level or an A at AS level in Mathematics, or 4) IB: 4 at HL or 5 at SL in Mathematics, or 5) approval of the Head of School based on alternative prior learning. R: MATH102, MATH108, MATH199
			S2	Campus	
EMTH119	Engineering Mathematics 1B	15	SU2	Campus	P: EMTH118, COSC131 R: MATH103, MATH109, MATH199
			S2	Campus	
MATH101	Methods of Mathematics	15	S1	Campus	R: Students who have been credited with any of EMTH118, EMTH119, MATH102 or MATH103, cannot subsequently be credited with MATH101.
			W	Campus	
			S2	Campus	

MATH102	Mathematics 1A	15	S1	Campus	P: 1. MATH101, or 2. NCEA 14 Credits at level 3 Mathematics, or 3. Cambridge: D at A level or an A at AS level in Mathematics, or 4. IB: 4 at HL or 5 at SL in Mathematics, or 5. Approval of the Head of School based on alternative prior learning. R: MATH108, MATH199, EMTH118
			S2	Campus	
MATH103	Mathematics 1B	15	S2	Campus	P: MATH102 or EMTH118 R: MATH109, MATH199, EMTH119
MATH110	Foundations of Applied Mathematics	15	S1	Campus	R: EMTH118, MATH101, MATH102, MATH199
MATH120	Discrete Mathematics	15	SU2	Campus	P: 1. MATH101 or MATH102 or EMTH118, or 2. NCEA 14 Credits (18 strongly recommended) at level 3 Mathematics, or 3. Cambridge: D at A level or an A at AS level in Mathematics, or 4. IB: 4 at HL or 5 at SL in Mathematics, or 5. approval of the Head of School based on alternative prior learning. R: MATH115
			S2	Campus	

## Physics

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
PHYS101	Engineering Physics A: Mechanics, Waves, Electromagnetism and Thermal Physics	15	SU2	Campus	P: 1) a) PHYS111 or NCEA 14 credits (18 credits strongly recommended) at level 3 Physics, and b) MATH101 or 14 Credits (18 credits strongly recommended) at level 3 Mathematics (including the standards 'Apply differentiation methods in solving problems (91578)' and 'Apply integration methods in solving problems(91579)', or 2) Cambridge: D at A level or an A at AS level in both Physics and Mathematics, or 3) IB: 4 at HL or 6 at SL in both Physics and Mathematics, or 4) approval of the Head of Department based on alternative prior learning. R: PHYS113, PHYS112 EQ: PHYS113
PHYS111	Introductory Physics for Physical Sciences and Engineering	15	S1	Campus	R: Students who have been credited with any of PHYS101, PHYS102, PHYS113 or PHYS114 cannot subsequently be credited with PHYS111.

## Product Design

Course Code	Course Title	Pts	2024	Location	P/C/R/RP/EQ
PROD101	Product Design 1	30	S2	Campus	P: PROD110 or ENGR101
PROD110	Design Principles	15	S1	Campus	R: ENGR101
PROD111	Materials Science for Design	15	S2	Campus	
PROD112	Digital Modelling for Design	15	S2	Campus	
PROD121	The Game Development Process	15	S2	Campus	
PROD131	Introduction to Formulation Science	15	S2	Campus	P: Any 15 points of CHEM C: Any 15 points of CHEM
PROD142	2D and 3D Art for Game and Film	15	S2	Campus	
PROD210	Design and Manufacture	15	S1	Campus	P: PROD112
PROD211	Materials Engineering and Selection	15	S1	Campus	P: PROD111
PROD212	Thermofluids	15	S1	Campus	P: Either 15 points of MATH/EMTH at 100-level or 15 points of PHYS at 100-level



PROD213	Industrial Product Design 1A	15	S1	Campus	P: One of PROD110, PROD112 or PROD101
PROD214	Industrial Product Design 1B	30	S2	Campus	P: 1) PROD101 and 2) either PROD210 or PROD211
PROD221	Game Design in Context	15	S1	Campus	P: one of COSC101 or PROD121 or DIG101
PROD222	Gaming Project Studio 1	30	S2	Campus	P: 1) one of PROD101, PROD142 or SENG201; and 2) either PROD121 or PROD223
PROD223	Immersive Game Design	15	S1	Campus	P: PROD121 or COSC121 or COSC131
PROD224	Computation for Games	15	S2	Campus	P: PROD121, and recommended preparation: 15 points of MATH, EMTH or STAT courses RP: 15 points of MATH, EMTH or STAT courses
PROD225	Special Topic: Game Development in Unreal and C++	15	S2	Campus	P: COSC121 or COSC131 COSC122 Subject to the approval of the Head of School.
PROD226	Special Topic: Narrative Design for Interactive Media	15	SU2	Campus	P: Subject to the approval of the Head of School. RP: PROD121 or PROD221 or COSC101/DIG101 or 30 points from 200+ level arts courses
PROD229	Introduction to Game Audio	15	S2	Campus	P: 45 points from any courses. R: MUSA229
PROD230	Product Properties and Processing	15	S1	Campus	P: CHEM111 and any 15 points at 100-level from MATH or EMTH. R: ENCH291
PROD231	Product Formulation 1	15	S1	Campus	P: PROD131
PROD232	Natural Products Properties and Production	15	S2	Campus	P: PROD235 or CHEM112
PROD233	Chemical and Healthcare Product Formulation 1A	15	S1	Campus	P: CHEM111
PROD234	Chemical and Healthcare Product Formulation 1B	30	S2	Campus	P: PROD101 and PROD233
PROD235	Formulation Chemistry	15	S1	Campus	P: CHEM111 RP: PROD131
PROD311	Solid CAD	15	S1	Campus	P: Either (ENME201 and ENME221) or (PROD112 and PROD211)
PROD313	Industrial Product Design 2A	15	S1	Campus	P: PROD213
PROD314	Industrial Product Design 2B	30	SU2	Campus	P: PROD214
PROD321	Interactive Computer Graphics and Animation	15	S1	Campus	P: PROD223
PROD322	Gaming Project Studio 2	30	S2	Campus	P: PROD222 and (PROD321 or PROD323)
PROD323	Game Engines and Artificial Intelligence	15	S1	Campus	P: PROD223
PROD331	Product Formulation 2	15	S1	Campus	P: PROD231
PROD333	Chemical and Healthcare Product Formulation 2A	15	S1	Campus	P: PROD233
PROD334	Chemical and Healthcare Product Formulation 2B	30	S2	Campus	P: PROD234 and (PROD230 or ENCH291)
PROD386	Special Topic	15	S2	Campus	P: Subject to the approval of the Head of School.
PROD387	Special Topic	15	S1	Campus	P: Subject to the approval of the Head of School.
			W	Campus	
			S2	Campus	
PROD388	Independent Course of Study	15	S1	Campus	P: Subject to the approval of the Head of School.
			W	Campus	
			S2	Campus	

PROD389	Independent Course of Study	15	S1	Campus	P: Subject to the approval of the Head of School.
			W	Campus	
			S2	Campus	

## Science

In addition to the courses listed in this schedule, a maximum of a further 45 points from Schedule V of the BSc Regulations may be included when 255 points are required from courses in this schedule.

## Environmental Science

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
ENVR101	Introduction to Environmental Science	15	S1	Campus	
ENVR209	Environmental Science and Resource Management	15	S2	Campus	P: (ENVR101 and GEOG106) or (GEOG110 and GEOG106) and 15 points of CHEM, GEOL or BIOL R: GEOG206, GEOG209 and ENVR201 EQ: GEOG209

## Health Sciences

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
HLTH201	Health Promotion	15	S2	Campus	P: Any 60 points at 100-level from any subject, or any 30 points at 100-level from HLTH or SPCO R: HLTH102

## Psychology

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
PSYC105	Introductory Psychology - Brain, Behaviour and Cognition	15	SU2	Distance Learning	R: PSYC103, PSYC104
PSYC106	Introductory Psychology - Social, Personality and Developmental	15	SU1	Distance Learning	R: PSYC103, PSYC104
			S2	Campus	
			S2	Distance Learning	
PSYC209	Sensation and Perception	15	S1	Campus	P: PSYC105 and PSYC106, or with the approval of the Head of School, a pass in a professional year of Engineering, or in approved courses in Art, Art History, or Computer Science
			S1	Distance Learning	
PSYC341	Environmental Psychology	15	S2	Campus	P: Any 120 points at 100-level from any subject. RP: PSYC105/PSYC106 or ENVR101
			S2	Distance Learning	

## Sport

Course Code	Course Title	Pts	2024	Location	P/C/R/PP/EQ
SPCO204	Biomechanics	15	S1	Campus	P: SPCO104
			S1	Distance Learning	