PRODUCT DESIGN AND ENTREPRENEURSHIP

https://www.pacific.edu/academics/product-design-degree-bs

Degrees Offered

Bachelor of Science

Majors Offered

Product Design and Entrepreneurship (BS)

The Bachelor of Science in Product Design and Entrepreneurship prepares students with an entrepreneurial mindset to develop user-centered designs and innovative solutions that create value and positively impacting society and the economy. the program is intended to promote interdisciplinary, science-and technology-based entrepreneurship to fill the gap created by the lack of a cohesive, coordinated approach to innovation and entrepreneurship. Students can choose a track based on their interest. The two tracks in the program are: Physical Design & Manufacturing and Digital User Experience & AI. These tracks align with the growing market demand for skills in new product development, product design, and User Experience (UX).

Learning Outcomes

- Students will demonstrate the ability to apply creative and critical thinking skills to develop innovative, user-centered designs and solutions that address real-world challenges.
- Students will develop their communication and storytelling abilities, allowing them to effectively convey the value and impact of their ideas to various stakeholders through a variety of media.
- Students will connect diverse ideas and concepts, integrating knowledge from various disciplines to generate innovative solutions to complex problems.
- Students will develop and build prototypes using an iterative design process, incorporating feedback from stakeholders to ensure that strategy, planning, and implementation are grounded in the needs and experiences of the end-user.
- Students will effectively collaborate on teams whose members collectively provide leadership and create an inclusive work environment.
- Student sill develop conceptual design, product (digital/physical) modeling, and prototyping skills to enhance the functionality and effectiveness of their designs and solutions.
- Students will demonstrate curiosity by actively exploring new concepts, emerging technologies, and new market trends, seeking to identify and engage with potential opportunities for innovation.
- Students will cultivate an entrepreneurial mindset, including hte ability to conduct market research and financial forecasts to drive innovation that positively impacts society and the economy.
- Students will develop reliable, high-quality products with market appeal, within the budgets and time demanded by competitive businesses.

Bachelor of Science Major in Product Design and Entrepreneurship

Students must complete a minimum of 120 units of academic work in order to earn the bachelor of science in product design and entrepreneurship.

I. General Education Requirements

For more details, see General Education (http://catalog.pacific.edu/stocktongeneral/generaleducationprogram/)

Minimum 28 units and 9 courses that include:

A. CORE Seminars (2 courses)

CORE 001	Problem Solving & Oral Comm	3
CORE 002	Writing and Critical Thinking	4

Note: 1) CORE Seminars cannot be taken for Pass/No Credit. ***2)*** Transfer students with 28 or more transfer credits taken after high school are exempt from both CORE seminars.

B. Breadth Requirement (7 courses, at least 3 units each)

At least one course from each of the following areas:

- Artistic Process & Creation
- Civic & Global Responsibility
- Language & Narratives
- Quantitative Reasoning
- Scientific Inquiry
- Social Inquiry
- World Perspectives & Ethics

Note: 1) No more than 2 courses from a single discipline can be used to meet the Breadth Requirement.

C. Diversity and Inclusion Requirement

All students must complete Diversity and Inclusion coursework (at least 3 units)

Note: 1) Diversity and Inclusion courses can also be used to meet the breadth category requirements, or major or minor requirements.

D. Fundamental Skills

Students must demonstrate competence in:

- Writing
- Quantitative Analysis (Math)

Note: 1) Failure to satisfy the fundamental skills requirements by the end of four semesters of full-time study at the University is grounds for academic disqualification.

II. Major Requirements

Students must complete all the required courses and five courses from a selected track.

PDEP 010	Product Design and Entrepreneurship Seminar	2
PDEP 057	AI for Designers	4
MATH 045 or MATH 051	Introduction to Finite Mathematics and Calculus Calculus I	3
MATH 037	Introduction to Statistics and Probability	4
BUSI 031	Principles of Financial Accounting	4
BUSI 053	The Legal and Ethical Environment of Business	4
BUSI 090	Introduction to Entrepreneurship	4
BUSI 105	Financial Management	4
BUSI 109	Management and Organizational Behavior	4
BUSI 107	Marketing Management	4
BUSI 141	Marketing Research	4

ECON 053	Introductory Microeconomics	4
PDEP 195	Capstone I	4
BUSI 173	Entrepreneurial Management Practicum	4
BUSI 180	Entrepreneurship and Business Strategy	4
Select one of the following:		
HIST 080	Digital Narratives	4
COMM 050	Digital Communication	3
DATA 101	Data Visualization and Storytelling	4
COMM 155	Persuasion	4
Select one of the following:		
PSYC 050	Introduction to Research Methods in Psychology	4
INTL 101	Social Science Research Methods	4
POLS 133	Political Science Research	4
COMM 043	Introduction to Interpersonal Communication	3
ENGL 039	Introduction to Digital Humanities	4
Select one of the following:		
PSYC 031	Introduction to Psychology	4
PHIL 015	Introduction to Cognitive Science	4
PSYC 079	Sensation and Perception	4
PSYC 053	Behavioral Psychology	4
Select one of the following:		
IDEA 040	Engineering Design Thinking	3
ARTH 101	Design Thinking	4
Select one of the following:		
EMGT 142 & 142L	Design and Innovation and Design and Innovation Lab	4
BUSI 143	Product Innovation	4
Select one of the following:		
BUSI 124	Entrepreneurial Finance	4
BUSI 125	Intermediate Financial Management	4
For Physical Design + Manufacturing Track		
ARTS 009	Principles of 3-D Design	4
MECH 015	Mechanical Engineering Graphics	3
PDEP 046	Material Processing and Selection	4
Select one Manufacturing electives:		
MECH 100 & 100L	Manufacturing Processes and Manufacturing Process Lab	4
ARTS 037	Sculpture	4
or EMGT 145	Product Design & Additive Manufacturing	
For Digital User Experience + AI Track		
ARTS 010	Introduction to Digital Design	3
COMP 051	Introduction to Computer Science	4
or COMP 061	Introduction to Programming for Data Science	
COMP 135	Human-Computer Interface Design	3
PDEP 157	UI Techniques and Applications	4
Select one UX Design elective:		
BUSI 151	Digital Marketing	4
MPRO 003	Media Tools	3
MPRO 005	Principles of Storytelling	3
PHIL 126	Digital Well-Being	4
Electives - select two out of the following:		
PHIL 142	Business Ethics	4
BUSI 142	Personal Selling and Sales Management	4
BUSI 149	Marketing Analytics	4
BUSI 169	International Management	4
BUSI 134	Conflict Management	4
BUSI 175	Leadership and Change	4
BUSI 181	Strategic Management and Policy	4
BUSI 124	Entrepreneurial Finance	4
BUSI 125	Intermediate Financial Management	4
HIST 080	Digital Narratives	4
COMM 050	Digital Communication	3
DATA 101	Data Visualization and Storytelling	4
COMM 155	Persuasion	4
PSYC 050	Introduction to Research Methods in Psychology	4
INTL 101	Social Science Research Methods	4
COMM 043	Introduction to Interpersonal Communication	3
POLS 133	Political Science Research	4
ENGL 039	Introduction to Digital Humanities	4
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PSYC 079	Sensation and Perception	4
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IDEA 040	Engineering Design Thinking	3
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EMGT 142 & 142L	Design and Innovation and Design and Innovation Lab	4
BUSI 143	Product Innovation	4
PHIL 126	Digital Well-Being	4
MPRO 003	Media Tools	3
MPRO 005	Principles of Storytelling	3
IDEA 130	Introduction to Mobile Robotics	4
BUSI 151	Digital Marketing	4
ARTS 037	Sculpture	4
EMGT 145	Product Design & Additive Manufacturing	3