

# PRODUCT INNOVATION, CERTIFICATE IN (UNDERGRADUATE CERTIFICATE)

The Certificate in Product Innovation allows undergraduate students to develop competency in the area of product innovation.

Employing a cross-disciplinary perspective that embodies concepts from arts, design, business, engineering, and humanities and sciences, students receive a robust learning experience that leads to an understanding of the challenges associated with and means for managing product design, product development and new-product introduction endeavors.

The Certificate in Product Innovation program runs concurrently with a student's major and is not a stand-alone program. In order to participate in the program, students must have a declared major in the schools of the Arts, Business, Engineering, the College of Humanities and Sciences, or another VCU unit that is an official partner of the da Vinci Center.

Students will learn how to:

- Collaborate successfully
- Develop product concepts
- Think across disciplines
- Make effective presentations

Students should apply to the program during or after taking the introductory course, INNO 200. Interested students should submit their application to the VCU da Vinci Center which administers the certificate program. Upon acceptance to the certificate program, a Change of Major form will be signed by the student and submitted to Records and Registration by the VCU da Vinci Center.

The certificate requires a minimum of 16 credit hours of approved course work as follows:

Course	Title	Hours
INNO 200	Introduction to Innovation and Venture Creation	1
Select two courses from the following non-discipline electives: <sup>1</sup>		6-9
INNO 221	Introduction to Arts and Design Principles	
INNO 223 or ECON 205 or MKTG 301	Introduction to Business Principles The Economics of Product Development and Markets Marketing Principles	
INNO 225	Introduction to Engineering and Technology Principles	
Select two discipline-specific electives (approved 300- or 400-level courses in the major) <sup>2</sup>		6
INNO 460	Product Innovation: da Vinci Project <sup>2</sup>	3
<b>Total Hours</b>		<b>16-19</b>

<sup>1</sup>

Choose the courses offered by the schools outside the major; students from outside the Schools of the Arts, Business, and Engineering must take all three non-discipline electives.

<sup>2</sup>

Students may take only one discipline-specific elective course while enrolled in INNO 460.

**The minimum total of credit hours required for this certificate is 16.**

Course	Title	Hours
<b>Core discipline electives</b>		
<b>School of the Arts</b>		
ARTS 350	The Creative Economy	
ARTS 351	Piloting the Enterprise	
ARTS 352	Idea Accelerator	
COAR 311	Type and Image	
COAR 321	Sequential Imaging	
COAR 332	Digital Drawing	
COAR 433	Game Design, Theory and Practice	
COAR 450	Business of Communication Arts	
CRAF 320	Furniture Design	
CRAF 351	Intermediate Glass Fabrication/Hot	
CRAF 362	Intermediate Textiles: Pattern Weaving	
FASH 341	Merchandise Planning and Control	
FASH 343	Fashion Forecasting	
FASH 401 & FASH 402	Design II Studio and Design II Studio	
FASH 493	Fashion Internship	
GDES 308	Web Design	
GDES 343	Systems in Design	
GDES 347	Interaction I	
GDES 356	Studio Management	
GDES 418	Design Center	
GDES 492	Design Internship	
IDES 301	Interior Design Studio I	
IDES 312	Advanced Interior Graphics II	
IDES 324	Furniture Design	
IDES 431	ID Business Practices	
IDES 491	Topics in Interior Design	
KINE 308	Web Technologies for Media Artists	
PAPR 421	Drawing, Advanced	
SCPT 322	Flexible Molds	
<b>School of Business</b>		
BUSN 323	Legal Environment of Business	
ECON 305	Public Finance	
INFO 361	Systems Analysis and Design	
MGMT 319	Leadership	
MGMT 321	Survey of Entrepreneurship	
MKTG 310	Information for Marketing Decisions	
MKTG 330	Integrated Marketing Communications	
MKTG 430	Experiential Marketing	
MKTG 450	Product Development and Management	
SCMA 350	Introduction to Project Management	

College of Engineering

CMSC 355	Software Engineering: Specification and Design
CMSC 401	Algorithm Analysis with Advanced Data Structures
EGRB 301	Biomedical Engineering Design Practicum
EGRB 307	Biomedical Instrumentation
EGRB 401	Biomedical Engineering Senior Design Studio
EGRB 402	Biomedical Engineering Senior Design Studio
EGRB 421	Human Factors Engineering
EGMN 300	Mechanical Systems Design
EGMN 309	Material Science for Engineers
EGMN 420	CAE Design
EGMN 402 & EGMN 403	Senior Design Studio (Laboratory/Project Time) and Senior Design Studio (Laboratory/Project Time)

College of Humanities and Sciences

BIOL 496	Biology Preceptorship: ____
CHEM 310	Medicinal Chemistry and Drug Design
ENGL 310	Professional Writing
ENGL 388	Professional, Scientific and Technical Writing
INTL 320	International Marketing
INTL 327	Introduction to Intercultural Communication
INTL 418	International Management
INTL 446	International Human Resource Management
MASC 300	Technical Prowess
MASC 301	Graphics for Journalism
MASC 334	Visual Communication and Design for Public Relations
MASC 367	Audio and Video Journalism
MASC 415	Advanced Video Journalism
MASC 425	Public Relations Research Methods
MASC 451	Invention
MASC 485	Web Site Design
PHYS 307	The Physics of Sound and Music
POLI 331	Public Administration
POLI 374	Financial Management for Nonprofits
PSYC 308	Stress and its Management
PSYC 310	Industrial Psychology
PSYC 317	Experimental Methods

The program director for product innovation will approve all course work intended to satisfy any elective requirements for the undergraduate Certificate in Product Innovation.

For more information, contact the student services coordinator for the VCU da Vinci Center at (804) 827-3764 or [davincicenter@vcu.edu](mailto:davincicenter@vcu.edu).