Proposal for
BA/BS in ENVIRONMENTAL DESIGN
College of Design
University of Oregon

Program Synopsis

The College of Design proposes to offer a multidisciplinary BA/BS in Environmental Design focusing on the visual and spatial design skills applied to the context of environmental sustainability. Administered in the Department of Landscape Architecture, this degree – the only undergraduate degree of its kind in the Pacific Northwest – will combine coursework from landscape architecture, architecture, interior architecture, planning, art, product design, and historic preservation

The unique multidisciplinary structure will equip students with skills for a range of careers related to urban and rural design, ecological restoration, natural hazards, and other areas associated with environmental sustainability. Thus, the degree will address student and professional demand for crafting cross disciplinary solutions to imminent environmental challenges.

Coursework in the degree will enable more diverse populations to enter the pipeline into design professions. These courses will develop student skills for careers in visual modeling of environmental amenities, challenges, and solutions; conceptualizing, planning and implementing design solutions for the built environment; exploring sustainable options in materials and materiality; and producing compelling visual/spatial communications for environmental action. The degree will offer natural opportunities for double majors with environmental studies; environmental science; product design; art; interior architecture; and planning, public policy and management.

Relationship to Institutional Mission

The Bachelor of Environmental Design degree aligns with University of Oregon's commitment to exceptional teaching, discovery, and public service. Applied projects woven into the required curriculum will hone students' ability to assess environmental issues critically, formulate creative and appropriate solutions, and effectively articulate these with the broadest range of audiences.

The focus on environmental challenges will utilize Oregon's reputation for ecological diversity and innovative sustainability practices. In addition, we will harness Oregon's ecologically fragile settings to study and apply a solutions-based curriculum. Climate crises, population migration, inequality of environmental amenities, and other issues require creative, cost-effective responses that are humane, ecologically-based, and sensitive to communities' social needs and ways of life. Our efforts, often applied locally, will have transferrable lessons for other regions of the nation and world.

Curriculum Overview

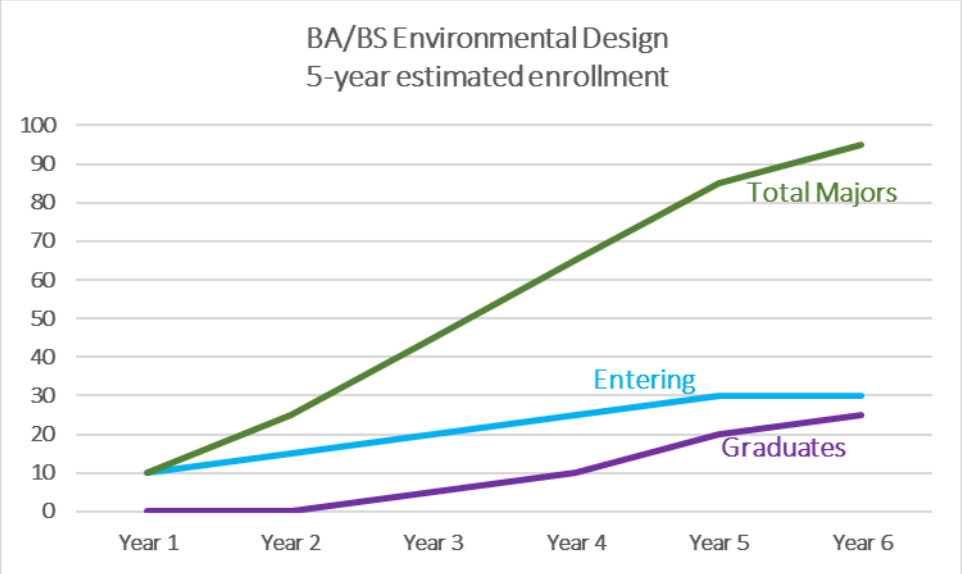
The BA/BS in Environmental Design is proposed to total 67 in-major credits, and with UO bachelor degree requirements will total 180 credits. Core credits are proposed to total 43 credits, and the track portion (containing both required track courses and electives) will total 24 credits. The **67-credit total** places the BA/BS in Environmental Design mid-range among bachelor's degrees at UO, as illustrated:

Credit Comparison

Bachelor's Degree	Credits
Art	68
Art & Technology	108
Environmental Studies	92
Geography	46
Art History	79
Political Science	48
Planning, Public Policy and Mgmt.	60
Product Design	120

Estimated Enrollment

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Entering	10	15	20	25	30	30
Total Majors	10	25	45	65	85	95
Graduates	0	0	5	10	20	25



Bachelor of Environmental Design Learning Objectives

Critical thinking

- T1: Demonstrate competency in analytical and critical intellectual tools used to address environmental design issues
- T2: Understand the range of applications design has in building solutions to environmental problems
- T3: Understand ways to evaluate the strengths and weaknesses of academic arguments, and ways to use evidence to support arguments
- T4: Describe the ethics and aesthetics of environmental design

Content knowledge

- K 1: Demonstrate the graphic competency needed to analyze environments.
- K 2: Apply knowledge and skills to develop and advocate for informed, appropriate design to solve complex environmental problems
- K 3: Describe, explain, and apply basic knowledge that maps onto a career objective
- K 4: Demonstrate visual literacy, including the roles perception plays in environmental design
- K 5: Demonstrate in-depth technical and material competency within an environmental design field

Dissemination

- D 1: Write clearly and persuasively to a wide range of audiences
- D 2: Present information orally and graphically in a clear and compelling manner

Course	T1	T2	T3	T4	K1	K2	K3	K4	K5	D1	D2
LA 301 Env Design Careers							X			X	X
Arch 201Intro to Architecture	X	X	X	X				X			
IARC 204 Understand. Contemp. Interiors	X	X	X	X		X		X			
LA 260 Understanding Landscapes	X	X	X	X				X		X	
LA 289 Foundations I		X			X	X			X	X	X
LA 337 Design for Sustainable World	X	X	X	X						X	X
LA 413 Analyzing Landscape Systems	X				X		X		X		X
PPPM 205 Introduction to City Planning	X		X			X	X			X	
PPPM 321 Inclusive Urbanism	X		X			X	X	X			X
PPPM 445 Green Cities	X		X			X	X		X	X	X
Contextualizing Courses		X								X	
Track	*	*	*	*	*	*	*	*	X	*	*

* Varies by course options within the track

Core Courses

The first set of core courses, totaling 36 credits, introduce design principles across scales (from small to continental), species, and intention (from visual representation to planning). Students also complete a career development course ideally early in their degree (sophomore year). The cross-disciplinary nature of the courses listed below will allow students from the B. Env. Design to enroll in existing introductory courses for majors in the various degree homes. As enrollment grows, the courses may be re-envisioned as a sequence of multidisciplinary courses that each cohort takes together.

Required Core Courses	Credits	Required	Notes
ARCH 201 Introduction to Architecture	4	required	
IARC 204 Understanding Contemporary Interiors	4	required	
LA 301 Environmental Design Careers	2	required	targeted for 2nd yr
LA 260 Understanding Landscapes	4	required	
LA 289 Foundations I	6	required	
LA 337 Design for Sustainable World	4	required	
PPPM 205 Introduction to City Planning	4	required	
PPPM 321 Inclusive Urbanism	4	required	
PPPM 445 Green Cities	4	required	

In addition, students will select two courses (totaling 7 or 8 credits) from a list of additional field courses. This is intended as a final opportunity to widen the scope of design inquiry to include perspectives from additional fields and demonstrate application of design principles in different career settings. Here, students may take a course in Historic Preservation, as they learn sustainability from the lens of preservation of structures and cultural landscapes, or they might focus on art, visual culture, or sustainable product design. Courses in this section cannot count toward minimum credits needed to complete a track.

Contextualization Courses: Take two courses from the following:		
AAAP 411 Introduction to Historic Preservation	3	required/select
ARCH 430 Architectural Contexts	4	required/select
ARCH 440 Human Context of Design	4	required/select
ARH 358 History of Design	4	required/select
ARH 150 Introduction to Visual Culture	4	required/select
ART 233 Drawing I	4	required/select
PD 101 Introduction to Product Design	4	required/select
Total Core Credits	**43 required**	

Tracks and Elective Courses

Tracks enable students in their junior and senior years to develop field-specific skills. For example, students may take advanced coursework to develop their digital media skills in the Design Technology track. The courses for the tracks or electives could include those offered in the College of Design along with courses in other units across campus, as long as the courses are offered regularly and there is

capacity to enroll additional students. The department will maintain a list of courses that are relevant to environmental design, are commonly offered across campus, and could be utilized to fulfill track requirements.

Design Technology Track		Minimum 24 credits	
LA	**451 Introduction Media I**	**2**	**required for track**
LA	**452 Introduction Media II**	**2**	**required for track**
LA	**453 Introduction Media III**	**2**	**required for track**
LA	423 Drawing the Landscape	4	elective
PPPM	434 Urban GIS	4	elective
LA	415 GIS	4	elective
LA	450 Environmental Data Visualization	4	elective
LA	450 Advanced AutoCAD	4	elective
LA	459 3D Mapping with LiDAR	2	elective
LA	459 Sensing the Environment	2	elective
LA	459 Sustainable SITES	4	elective
ART	233 Drawing I	4	elective
GEOG	481 GIScience I	4	elective
GEOG	482 GIScience II (pre-req of 481)	4	elective
GEOG	485 Remote Sensing I (pre-req GEOG 481)	4	elective
GEOG	486 Remote Sensing II (pre-req GEOG 485)	4	elective
GEOG	490 Drones and Mapping (pre-req GEOG 485)	4	elective
GEOG	493 Advanced Cartography (pre-req 481)	4	elective

Landscape Design Track		Minimum 24 credits	
LA	**289 Foundations II**	**6**	**required for track**
LA	**451 Introduction Media I**	**2**	**required for track**
LA	**452 Introduction Media II**	**2**	**required for track**
LA	**453 Introduction Media III**	**2**	**required for track**
LA	439 Introductory Design I: Systems	6	elective
LA	439 Introductory Design II: Landform	6	elective
LA	439 Introductory Design III: Assemblies	6	elective
LA	474 History of Landscape Architecture I	4	elective
LA	475 History of Landscape Architecture II	4	elective
LA	440 Land Planning Analysis	4	elective
LA	423 Drawing the Landscape	4	elective
LA	326 Fall Plants	4	elective
LA	328 Spring Plants	4	elective
LA	415 GIS	4	elective
LA	413 Analyzing Land Systems	4	elective
LA	410 Sustainable Design Practices & Principles	4	elective
LA	459 Certifying Sustainability – SITESv2 Ratings	4	elective
LA	472 Landscape Architecture Theory	4	elective
ARH	457 Land and Environmental Art	4	elective
ARH	368 Arts and Visual Cultures of Climate Change	4	elective

Urban Sustainability Track	Minimum 24 credits	
PPPM 434 Urban GIS	**4**	**required for track**
PPPM 442 Sustainable Urban Development	**4**	**required for track**
PPPM 440 Land Use Policy	**4**	**required for track**
PPPM 370 Global Sustainable Development and Policy	4	elective
PPPM 408 Workshop: Environmental Impact Assessment	4	elective
PPPM 432 Justice and Urban Revitalization	4	elective
PPPM 438 Topics in Transportation Planning	4	elective
PPPM 443 Natural Resources Policy	4	elective
PPPM 448 Collaboration	4	elective
Law 101 Introduction to American Law	4	elective
Law 201 Introduction to Environmental Law and Policy	4	elective
Law 310 Environmental Regulation	4	elective
ARCH 431 Community Design	3	elective
ARCH 435 Principles of Urban Design	4	elective
GEOG 481 GIScience I	4	elective
GEOG 482 GIScience II (pre-req of 481)	4	elective
GEOG 485 Remote Sensing I (pre-req GEOG 481)	4	elective
GEOG 486 Remote Sensing II (pre-req GEOG 485)	4	elective
GEOG 490 Drones and Mapping (pre-req GEOG 485)	4	elective
GEOG 493 Advanced Cartography (pre-req 481)	4	elective

Resilience & Advocacy Track	Minimum 24 credits	
PPPM 101 Advocacy and Social Change	**4**	**required for track**
PPPM 201 Introduction to Public Policy	**4**	**required for track**
PPPM 340 Climate Change Policy	**4**	**required for track**
PPPM 444 Environmental Policy	4	elective
PPPM 443 Natural Resources Policy	4	elective
LA 326 Fall Plants	4	elective
LA 328 Spring Plants	4	elective
LA 441 Applied Ecology	4	elective
LA 390 Urban Farm	4	elective
LA 429 Civic Agriculture	4	elective
LA 410 Design for Climate Action	4	elective
PPPM 442 Sustainable Urban Development	4	elective
PPPM 440 Land Use Policy	4	elective
PPPM 370 Global Sustainable Development and Policy	4	elective
PPPM 408 Workshop: Environmental Impact Assessment	4	elective
PPPM 432 Justice and Urban Revitalization	4	elective
PPPM 410 Community Organizing	4	elective
IARC 476 History of Interior Architecture III	3	elective
ARH 457 Land and Environmental Art	4	elective
ARH 368 Arts and Visual Cultures of Climate Change	4	elective

Sustainable Built Environments Track		Minimum 24 credits	
LA	451 Introduction Media I	2	required for track
LA	452 Introduction Media II	2	required for track
LA	453 Introduction Media III	2	required for track
ARCH	430 Architectural Contexts	4	elective
ARCH	440 Human Context of Design	4	elective
ARCH	450 Spatial Composition	4	elective, with instr approval
ARCH	431 Community Design	3	elective
ARCH	435 Principles of Urban Design	4	elective, dual location
ARCH	437 Theory of Urban Design II	3	elective, dual location
ARCH	407 Sustainable Urbanism	3	elective, dual location
ARCH	407 Real Estate Development	3	elective, dual location, alt. yrs.
ARCH	492 Environmental Control Systems 2	3	elective, with instr approval
ARH	314 History of World Architecture I	4	elective
ARH	315 History of World Architecture II	4	elective
IARC	444 Furniture: Theory & Analysis	3	elective
IARC	447 Color Theory and Application for the Built Env.	3	elective
IARC	474 History of Interior Architecture I	3	elective
IARC	475 History of Interior Architecture II	3	elective
IARC	476 History of Interior Architecture III	3	elective
ART	233 Drawing I	4	elective
PD	370 Design Process	4	elective, prereq ART 233
PD	350 Objects & Impacts	4	elective, prereq PD 370
PD	340 Design for Use	4	elective, prereq PD 350

Sample Degree Plan

	FALL				WINTER				SPRING		
	Course	Course Name	Credits		Course	Course Name	Credits		Course	Course Name	Credits
Year 1	WR 121	College Composition I	4		WR 122/3	College Composition II/III	4		GP Course	Global Perspectives Course	4
	SSC	Social Science Course	4		SSC	Social Science Course	4		SSC	Social Science Course	4
	LA 260	Understanding Landscapes	4		LA 289	Foundations I	6		PPPM 205	Introduction to City Planning	4
	ARCH 201	Introduction to Architecture	4						LA 337	Design for a Sustainable World	4
	Total		16		Total		14		Total		16
Year 2	A&L	Arts & Letters Course	4		A&L	Arts & Letters Course	4		A&L	Arts & Letters Course	4
	SCI	Science Course	4		SCI	Science Course	4		US Course	US: Diversity, Inequality, Agency	4
	IARC 204	Under. Contemp. Interiors	4		PPPM 321	Inclusive Urbanism	4		PPPM 445	Green Cities	4
	Context	Contextualizing Course	4		LA 301	Env. Design Careers	2		Context	Contextualizing Course	4
	Total		16		Total		14		Total		16
Year 3	M/L	Math or Language Course	4		M/L	Math or Language Course	4		M/L	Math or Language Course	4
	TRK	Track Required Course	4		TRK	Track Required Course	4		TRK	Track Required Course	4
	TRK	Track Elective Course	4		TRK	Track Elective Course	4		SCI	Science Course	4
	TRK	Track Elective Course	4		Elective	Elective Course	4		Elective	Elective Course	4
	Total		16		Total		16		Total		16
Year 4	TRK	Track Elective Course	4		M/L	Math or Language Course	4		M/L	Math or Language Course	4
	M/L	Math or Language Course	4		TRK	Track Elective Course	4		Elective	Elective Course	4
	Elective	Elective Course	4		Elective	Elective Course	4		Elective	Elective Course	4
					Elective	Elective Course	4				
	Total		12				16				12
	TOTAL										**180**

Operational Components

The program will utilize existing capacity, or add capacity, within existing courses in the College of Design. Almost all of the core courses already exist and enroll students in programs like the Landscape Architecture, Product Design, Art, and Planning, Public Policy, and Management.

In terms of staffing, the proposed Landscape Architecture IHP position will cover some of the teaching. Additional Pro Tem/NTTF resources will be needed to increase the capacity in some of the courses that are at or near capacity. These anticipated recurring costs are outlined in the budget spreadsheet. Some of the Pro Tem/NTTF costs could be reduced by future tenure track hiring in Landscape Architecture and other units.

Advising: College of Design Academic Advising provides advising support for all undergraduate majors in the College. As student numbers increase, the College will need to add additional advising capacity.

New courses: Aside from a 2-credit career course for degree majors (LA 301 Environmental Design Careers), this proposal utilizes existing courses across the College of Design.

Program direction: The Department of Landscape Architecture will need a faculty member to direct the program, overseeing assignment of faculty advisors, reviewing applications, revising curriculum as needed, and oversee administration. Program directors usually are compensated with one 4-credit course release.

Accommodation of increased numbers of students: As the enrollment grows from the launch year onward, there will be a need for larger sections (some with GE support) or additional sections to avoid bottlenecks. In the short term, this may require additional resources for GEs, NTTF, or Pro Tem faculty. The two landscape architecture faculty positions awarded in the IHP process to replace recent department retirements and departures will be important for accommodating increased student enrollment. Several IHP proposals in affiliated departments will also add teaching capacity to help address bottlenecks in the curriculum. The spreadsheet below shows the anticipated Pro-Tem/NTTF needs assuming the addition of the two new LA faculty members awarded through the IHP process.

Facilities: As noted above, a first-year studio (Winter term) will require two to three more desks and more flexible use of current studio rooms in Lawrence Hall, but will not require additional classroom space.

Enrollment Estimates

We anticipate that Fall 2023 will be a "soft launch" due to the time for program approval. Therefore, we anticipate smaller numbers of students being aware of this degree option. There are currently over 1200 applicants for 330 spots in the UO's Bachelor of Architecture program, and we plan to refer highly qualified students who are not offered a spot to consider the Bachelor of Environmental Design.

The estimates were based on a conservative estimate of demand based on a report from Hanover Research commissioned by the University of Oregon. The report found a somewhat flat demand in student demand, but programs emphasizing interdisciplinary approaches, responsible design, and sustainability have seen strong to very strong student demand. The report found that holders of bachelor’s degrees in environmental design are competitive in the market. It should also be noted that the Hanover report examined a narrow definition of career pathways, compared to the more broadly described sustainability professionals highlighted in other parts of the report.

Anticipated Demand

The program will attract students who are interested in sustainable design, visual and spatial design skills. It will appeal to students interested in careers ranging from urban and rural design, ecological restoration, natural hazards, visual modelling, and design solutions for the built environment.

A Persona Analysis of the College of Design's fall enrollment of freshmen showed that students who applied to a College of Design degree (primarily architecture) gravitated toward a different university if they did not attend the UO. Given this untapped source of potential students, the above trajectory of majors appears especially conservative, and actual enrollment could be well above that. UC Boulder, for example, had 140 degree conferrals in 2019 (Hanover report). Overall, the Hanover report found that a Bachelor of Environmental Design degree would be viable as part of a multidisciplinary program, particularly given the UO reputation for innovation, sustainability, and environmental design.

Employment Success

The Hanover Report found that holders of bachelor's degrees in environmental design are competitive in the market, and only three percent of related occupations require a graduate degree. This analysis was limited to landscape architecture and architecture related occupations, and did not consider broader sustainability occupations in government, nonprofit organizations, or in the private sector. For example, planning consulting firms, engineering firms, development companies, and cities all employ sustainability professionals with expertise related to urban and community development.