



New Academic Program Workflow Form

General

Proposed Name: Real Estate

Transaction Nbr: 00000000000142

Plan Type: Major

Academic Career: Undergraduate

Degree Offered: Bachelor of Science

Do you want to offer a minor? N

Anticipated 1st Admission Term: Fall 2024

Details

Department(s):

ARCH

DEPTMNT ID	DEPARTMENT NAME	HOST
2523	Planning	Y

Campus(es):

MAIN

LOCATION	DESCRIPTION
TUCSON	Tucson

Admission application terms for this plan: Spring: N Summer: N Fall: Y

Plan admission types:

Freshman: Y Transfer: N Readmit: N Graduate: N

Non Degree Certificate (UCRT only): N

Other (For Community Campus specifics): N

Plan Taxonomy: 04.1001, Real Estate Development.

Program Length Type: Program Length Value: 0.00

Report as NSC Program:

SULA Special Program:

Print Option:

Diploma: Y Bachelor of Science in Real Estate

Transcript: Y Bachelor of Science in Real Estate

Conditions for Admission/Declaration for this Major:

None.

Requirements for Accreditation:

None.

Program Comparisons

University Appropriateness

Today's real estate professionals must be able to succeed across the "triple bottom line," executing projects that perform well financially, socially, and environmentally. They must also be responsible to those who invest, live, and work in and around their projects.

Consequently, students wishing to work in real estate must learn to anticipate the economic, social, and environmental implications of their work and effectively manage them in cooperation with urban planners, designers, engineers, investors, lenders, stakeholders, and political actors. To the extent that our proposed Bachelor of Real Estate meets these objectives, it will reflect UArizona's core purpose of "working together to expand human potential, explore new horizons, and enrich life for all." Students will graduate knowing how to foster innovations in real estate that respond to grand challenges in the built environment, such as public health, climate risk, financial risk, fiscal health, affordable housing, displacement, and more. This program is dedicated to teaching students how they can maximize positive social and environmental outcomes during profitable real estate management, sales, investing, and development.

Aligning with CAPLA's strategic plan "Building a Changing World," our innovative MRED program focuses on sustainable cities, energy conservation, green building technology, multi-modal transportation, and public/private partnerships in place making. Aspiring and professional real estate developers who have a passion for environmentally friendly development are drawn to our real estate development courses as we promote sustainable and responsible real estate practice. By building upon our existing reputation and courses, we are positioned to offer the only Bachelor of Real Estate in the nation that has a branded focus

on sustainability and innovative place-making.

Arizona University System

NBR	PROGRAM	DEGREE	#STDNTS	LOCATION	ACCRDT
1	NA		0		Y

Peer Comparison

See attached BRE Peer_comparison.DOCX

Resources

Library

Acquisitions Needed:

None. The liaison librarian to the School of Landscape Architecture identified several data sources, but in discussion with the faculty, we do not anticipate any new expenditures. A review of the UArizona library's current print and online resources for landscape architecture indicated that the subject matter was already well covered.

Physical Facilities & Equipment

Existing Physical Facilities:

Currently, there is no need for additional facilities or infrastructure. However, it is expected that CAPLA will grow enrollments in existing undergraduate and graduate programs. To accommodate this growth, CAPLA has launched a new building initiative.

Additional Facilities Required & Anticipated:

None.

Other Support

Other Support Currently Available:

School of Landscape Architecture and Planning Support:

- Director of the School of Landscape Architecture and Planning Lauri Macmillan Johnson oversees all programs in the school and reports directly to the dean.
- Administrative Assistant Holly Garland handles travel authorizations and disbursement vouchers for faculty; event coordination; and assists students with conference travel. She works with the business office to assist with the hiring of graduate teaching and research assistants and adjunct faculty and completes other administrative duties for the school as they arise.
- Senior Program Coordinator Laura Jensen, MLA, handles course management and scheduling and promotion and tenure packets, and

provides a wide variety of administrative support for all school programs.

- Assessment Coordinator Kelly Eitzen Smith, PhD, collects program and student data and oversees and coordinates the assessment of all programs in the school for outside accrediting bodies as well as for internal University of Arizona program assessment.

- Senior Academic Advisor Sean Kramer-Lazar and Academic Advisor Tayler Mears advise undergraduates in the school.

- Other Office Support: The programs in the school share a graduate assistant who works 20 hours per week and is available to assist with organizational and office related tasks as needed.

College-Level Support:

Recruiting, Marketing and Advising

- Recruitment Coordinator Cylan Shaffer is responsible for college-wide recruitment efforts.

- Director of Marketing and Communications Simmons Buntin: Works in conjunction with the dean, associate dean, directors, faculty, program coordinators, and other related staff in the coordination of marketing and promotional materials and efforts.

IT Support

- Senior IT Manager Lucas Guthrie and Senior IT Support Analyst Adam Katz manage and maintain CAPLA's IT infrastructure and equipment.

- Course Design Specialist Sandra Bernal works closely with subject matter experts and faculty on online course instructional design, maintenance and troubleshooting of online d2l courses, and course mapping.

Business Support

- Assistant Dean of Finance and Administration Simon White focuses on business development and identifying funding sources necessary to meet the college and university missions.

- Business Manager Carmen Robles oversees business office staff.

- Senior Data and Financial Analyst Jeff Guba provides CAPLA with various types of reports relating to financial and student data.

- Accountant Danielle Orozco provides support to the CAPLA community related to accounting and human resources.

Development and Alumni Relations

- Director of Development and Alumni Affairs Angie Smith directs and manages the identification, qualification, cultivation, and solicitation of major individual, corporate, and foundation prospects in support of CAPLA.

- Alumni and Development Affairs Manager Emilio Romero and Development and Alumni Assistant Win Dunham organize alumni and scholarship events and maintain contact with alumni and donors through newsletters and direct communication.

Administrative Support

- Associate Dean for Academic Affairs Laura Hollengreen coordinates promotion and tenure activities, oversees the college curricular committee and college constitution and bylaws committee, and provides general support for faculty and students.

- Associate Dean for Research Bo Yang coordinates research activities for the college.

These individuals work together as a team committed to all programs in the college. Dean Nancy Pollock-Ellwand, who holds degrees in Landscape Architecture (BLA), Architecture (MA), and Planning (PhD), the college and the school are well supported and staffed, thus ensuring the attainability of program mission and goals.

Other Support Needed over the Next Three Years:

This is a new program that anticipates substantial growth. As such, we anticipate the need for three 1.0 FTE tenure-line faculty starting year 2, 3, and 4 after the launch of the program. We also anticipate a need for additional 1.7 FTE career-track faculty over the course of the first four years of the program--starting from 0.5 FTE in Year 1, increasing to a total of 1.0 FTE in Year 3 and 1.7 FTE in Year 4. We have constrained new admissions to start with Freshman-only to roll out the program curriculum and increase hiring faculty over the first few years of the program.

The program will require growth in both faculty and staff. In our plan and budget, we aim to hire a 1.0 FTE program coordinator the year before the program launches, and we anticipate increasing additional 0.1 FTE (Year 1) to 1.4 FTE (Year 4) to support the program in recruitment and advising. All program requirements will be funded by program revenues to avoid impact on other programs.

Comments During Approval Process

10/20/2023 4:42 PM

MELANIECMADDEN

Comments
Changing Degree Type to Bachelor of Science and updating associated documentation per Laura Hollengreen, 10/20/23

10/20/2023 5:02 PM

MELANIECMADDEN

Comments
Approved.



ACADEMIC PROGRAM – ADDITIONAL INFORMATION FORM

To be used once the preliminary proposal has been approved.

I. MAJOR REQUIREMENTS–

UNDERGRADUATE

Total units required to complete the degree	120
Upper-division units required to complete the degree	42
Foundation courses	
Second language	2nd Semester Proficiency
Math	M-Strand
General education requirements	<p>1 course / 3 units – UNIV 101 Intro to GE 3 courses / 9 units – Building Connections 4 courses/ 12 units – Exploring Perspectives) one course from each domain required)</p> <ul style="list-style-type: none"> -Artist -Humanist -Natural Scientist -Social Scientist <p>Students must choose their Exploring Perspectives and Building Connections courses to fulfill the following attribute requirements:</p> <ul style="list-style-type: none"> • Diversity and Equity Attribute - 2 courses • Quantitative Reasoning - 2 courses • World Cultures and Societies Attribute - 1 course • Writing Attribute - 2 courses <p>1 course / 3 units – UNIV 301 GE Capstone</p>
Pre-major?	No
List any special requirements to declare or gain admission to this major (completion of specific coursework, minimum GPA, interview, application, etc.)	None
Major requirements	



ACADEMIC PROGRAM – ADDITIONAL INFORMATION FORM

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Minimum # of units required in the major (units counting towards major units and major GPA)	<p>55</p>
Minimum # of upper-division units required in the major (upper division units counting towards major GPA)	<p>34</p>
<u>Minimum # of residency units to be completed in the major</u>	<p>18</p>
Required supporting coursework	<p>Supporting Courses: 6 courses (16 units)</p> <ul style="list-style-type: none"> • (New) RED 1XX (1) Survey of Real Estate and Society • (New) RED 1XX (3) Urban Land • (New) RED 2XX (3) Intro to Quantitative Methods for Real Estate • (New) RED 4XX (3) Advanced Quantitative Methods for Real Estate • Ethics Elective (3): PHIL 210, PHIL 323, or PHIL 322 • SBE 202 (3) Professional Communication and Presentation
Major requirements	<p>Practice Core: 6 courses (18 units)</p> <ul style="list-style-type: none"> • RED 201 (3) Principles of Real Estate • (New) RED 3XX (3) Property Management for Business and Sustainability • (New) RED 4XX (3) Principles of Architecture and Design • RED 401 (3) Intro to Real Estate Finance • RED 415 (3) Construction and Project Management • RED 409 (3) Real Estate Transactions and Law <p>Sustainability & Society Core: 5 courses (15 units)</p> <ul style="list-style-type: none"> • SBE 201 (3) Sustainable Design and Planning • (New) RED 2XX (3) History of Urban Development • RED 407 (3) Survey of Responsible RED • (New) RED/PLG 4XX (3) Housing Policy and Development • (New) RED 3XX (3) Innovation in Sustainable Building and Landscape Sciences <p>Business Skills Electives: Select 3 courses (9 units)</p> <ul style="list-style-type: none"> • LAW 454 (3) Environmental Law and Policy, • LAW 416 (3) Introduction to Business Organizations Law, • ACCT 250 (3) Survey of Accounting, • RED 485 (3) Foundations of Economics for Planning and Real Estate Development, OR • PLG 597Q (3) Public Participation and Dispute Resolution. <p>Built Environment Electives: Select 3 courses (9 units)</p>

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	<ul style="list-style-type: none"> • ARC 461E (3) Sustainable Design and the LEED Initiative, • PLG 401A (3) Planning Theory and Practice, • ARC 471S (3) Contemporary Architecture and Urban Theory, • SBE 201 (3) Sustainable Design and Planning, <i>OR</i> • LAR 470 (3) Introduction to GIS for Planning and Landscape Architecture. <p>Capstone Requirement:</p> <ul style="list-style-type: none"> • RED 498 (4) Real Estate Capstone
Internship, practicum, applied course requirements (Yes/No). If yes, provide description.	Yes. Complete 4 units: -RED 498 Real Estate Capstone: Project class where students apply the knowledge and technical skills they have developed through the major to a real estate project. The focus of the project will vary based on the class and instructor's interest and expertise, but can include real estate development proposals and consultative analyses of real-world real estate problems.
Senior thesis or senior project required	No
Additional requirements (provide description)	No
Minor (specify if optional or required)	Optional
Any <u>double-dipping restrictions</u>	No

II. CURRENT COURSES–

Course prefix and number	Units	Title	Pre-requisites	Modes of delivery	Typically Offered (F, W, Sp, Su)	Dept signed party to proposal?
PHIL 210	3	Moral Thinking	None	Online, In-person	F, Sp, Su, W	No
PHIL 323	3	Environmental Ethics	Two courses from Tier One, Individuals and Societies (INDV 101, 102, 103)	Online, In-person	F, Sp, Su	No
PHIL 322	3	Business Ethics	None	Online	F, Sp, Su	No
SBE 201	3	Sustainable Design and Planning	None	Online, In-person	F, Su	Yes
SBE 202	3	Professional Comm/Presentation	None	Online, In-person	Sp	Yes
RED 201	3	Principles of Real Estate ¹	None	In-person	F, Sp	Yes
RED 401	3	Intro to Real Estate Finance	C or better in RED 301 - Introduction to Real Estate.	Online, In-person	F, Sp	Yes

¹ Revise from RED 301 to RED 201, update course title to differentiate from similar course listed



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RED 407	3	Survey of Responsible RED	None	Online, In-person	F	Yes
RED 409	3	Real Estate and Transactions Law ²	None	Online, In-person	F, Su	Yes
RED 415	3	Construction & Project Management	None	Online	F	Yes
RED 498	4 ³	Real Estate Capstone	Students must have completed RED 401 with a grade of C or better and be enrolled in the Minor in Real Estate. This course is intended to be the final course offering for students in the Minor.	Online, In-person	F, Sp	Yes
RED 421	3	Principles of Architecture & Urban Design ⁴	None	Online	Sp	Yes
LAW 454	3	Environmental Law and Policy	None	Online	Sp	Yes
LAW 416	3	Introduction to Business Organizations Law	None	In-person	F, Sp, Su	Yes
ACCT 250	3	Survey of Accounting	None	Online, In-person	F, Sp, Su	Yes
RED 485	3	Foundations of Economics for Planning and Real Estate Development	None	Online	F	NA
PLG 597Q	3	Public Participation and Dispute Resolution	None	In-person	F, Sp	Yes
ARC 461E	3	Sustainable Design and the LEED Initiative	None	In-person	Sp	Yes
PLG 401A	3	Planning Theory and Practice	None	In-person	F	Yes
ARC 471S	3	Contemporary Architecture and Urban Theory	Junior or Senior Standing	Online, In-person	F	Yes
SBE 301	3	Intro to Design Thinking	None	Online, In-person	Sp, Su	Yes
LAR 470	4	Introduction to GIS for Planning and Landscape Architecture	None	Online, In-person	Fa, Sp	Yes

III. NEW COURSES NEEDED –

² Revise/update course material and name. Currently RED 409/509 Due Diligence and Entitlements

³ Course will be updated from 3 to 4 credits.

⁴ Revise/update course material and name. Currently RED 421 Placemaking and Urban Form



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Course prefix and number (include cross-listings)	Units	Title	Pre-requisites	Modes of delivery (online, in-person, hybrid)	Status*	Anticipated first term offered	Typically Offered (F, W, Sp, Su)	Dept signed party to proposal? (Yes/No)	Faculty members available to teach the courses
RED 1XX	1	Survey of Real Estate and Society	None	In-person	D	F 2024	F	NA	Jaramillo
RED 1XX	3	Urban Land	None	In-person	D	SP 2025	S	NA	Jaramillo
RED 2XX	3	Intro to Quantitative Methods for Real Estate	None	In-person	D	F 2025	F	NA	Kuhlmann
RED 2XX	3	History of Urban Development	None	In-Person	D	SP 2026	F	NA	Kuhlmann
RED/PLG 4XX	3	Housing Policy Development &	None	In-person	D	S 2027	S	NA	Jaramillo
RED 4XX	3	Principles of Architecture & Urban Design	None	In-person	D	S 2027	S	NA	Planned hire, (TT F25)
RED 3XX	3	Innovation in Sustainable Building and Landscape Sciences	None	In-person	D	F 2027	F	NA	Planned hire (TT F27)
Red 4XX	3	Advanced Quantitative Methods and Market Analysis	RED 2XX (Intro to Quantitative Methods for Real Estate)	In-person	D	F 2027	F	NA	Planned hire (TT F26)
RED 3XX	3	Property Management for Business & Sustainability	None	In-person	D	SP 2028	S	NA	Planned hire (CT F27)

*In development (D); submitted for approval (S); approved (A)

Click or tap here to enter text.

IV. FACULTY INFORMATION-

Faculty Member	Involvement (Note: faculty will also teach in graduate real estate and planning programs)	UA Vitae link or Box folder link
Daniel Kuhlmann	Teach RED 2XX (Intro to Quant Methods), RED 2XX (History of Urban Development)	Box folder link
Atticus Jaramillo, new hire starting fall 2023	Teach RED 1XX (Survey of Real Estate and Society), RED 1XX (Urban Land), RED 440	Box folder link



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James Marian	Teach RED 101, Internship supervisor	Box folder link
Brian Bidolli	TBD	Box folder link
0.5 CT hire • Starting Fall 2024	Teach SBE 201; LAR 470	n/a
TT hire • Starting Fall 2025 • development practice	Teach SBE 202, RED 407; RED 4XX (Principles of Architecture & Urban Design)	n/a
TT hire • Starting Fall 2026 • real estate markets + finance	Teach RED 4XX (Advanced Quantitative Methods), RED 310, RED 401	n/a
0.5 CT hire • Starting Fall 2026	Teach RED 409, RED 421	n/a
TT hire • Starting Fall 2027 • sustainable real estate	Teach RED 3XX (Innovation in Sustainable Building and Landscape Sciences), RED 201	n/a
0.7 CT hire • Starting Fall 2027	RED 498, RED 201, RED 3XX (Property Management for Business & Sustainability)	n/a



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V. GRADUATION PLAN –

Semester 1		Semester 2		Semester 3		Semester 4	
Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units
UNIV 101 Intro to Gen Ed	1	Gen Ed Exploring Pers	3	Gen Ed Exploring Pers	3	Gen Ed Bldg Connections	3
ENG 101	3	Gen Ed Bldg Connections	3	Gen Ed Exploring Pers	3	Ethics options	3
Foundation Second Language	4	ENG 102	3	RED 2XX Intro to Quantitative Methods for Real Estate	3	RED 2XX History of Urban Development	3
MATH 107 / MATH 112	3	Foundation Second Language	4	SBE 201 Sustainable Design and Planning	3	RED 201 Intro to Real Estate and Development	3
RED 1XX Survey of Real Estate and Society	1	RED 102 Urban Land	3	Open Elective	3	Business Skills Elective	3
Total	12	Total	16	Total	15	Total	15

Semester 5		Semester 6		Semester 7		Semester 8	
Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units
Gen Ed Bldg Connections	3	Gen Ed Exploring Pers	3	RED 4XX Advanced Quantitative Methods and Market Analysis	3	RED 498 Real Estate Capstone	4
RED 401 Intro to Real Estate Finance	3	UNIV 301 GE Capstone	1	RED 415 Construction & Project Management	3	RED 3XX Property Management for Business & Sustainability	3
RED 409 Real Estate and Transactions Law	3	SBE 202 Professional Comm/Presentation	3	RED 3XX Innovation in Sustainable Building and Landscape Sciences	3	Built Environment Elective	3
RED 407 Survey of Responsible RED	3	RED 4XX Principles of Architecture & Urban Design	3	Business Skills Elective	3	Open Elective	3
Business Skills Elective	3	RED/PLG 440 Housing Policy & Development	3	Built Environment Elective	3	Open Elective	3
		Built Environment Elective	3				
Total	15	Total	16	Total	15	Total	16



ACADEMIC PROGRAM – ADDITIONAL INFORMATION FORM

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VI. Curriculum Map and Assessment Map -

Program: Bachelor of Real Estate

<p>Learning Outcome #1: Students will apply their knowledge of key real estate concepts to professional scenarios and projects.</p>
<p>Concepts: Students will explain the components of real estate supply and demand, the history of the real estate industry, the ecological impact of the built environment, and key legal concepts important to regulation of real property.</p>
<p>Competencies: Students will apply this knowledge to analyze applied professional scenarios and real estate projects.</p>
<p>Assessment Methods: We will assess this learning outcome through student projects in two courses, RED 407 Survey of Responsible Real Estate, RED 498 Real Estate Capstone, and through an Exit Survey we will distribute to graduating students.</p>
<p>Measures: Direct measurement: In RED 407 and RED 498, we will use a rubric that measures students' fundamental knowledge and application of key real estate concepts in their final project. Indirect measurement: In the exit survey, we will ask students to self-assess their knowledge of key real estate concepts.</p>
<p>Learning Outcome #2: Students will employ the analytical tools commonly used in real estate practice.</p>
<p>Concepts: Students will be able to analyze the financial, environmental, and social impact of real estate projects, as well as estimate the demographic and socio-economic drivers of demand for real estate.</p>
<p>Competencies: Students will apply the methods to assess the financial, economic, environmental, and demographic impact of real estate in real-world contexts.</p>
<p>Assessment Methods: We will assess this learning outcome through a student project in the terminal course in the program's methods sequence, RED 4XX Advanced Quantitative Methods and Market Analysis, and through an Exit Survey we will distribute to graduating students.</p>
<p>Measures: Direct measurement: In RED 4XXX (Advanced Quantitative Methods and Market Analysis), we will use a rubric to assess students' ability to apply analytical tools to assess real estate projects, this will include assessment of acumen with metrics used to assess the financial, demographic, and ecological impact of real estate projects. Indirect measurement: In the exit survey, we will ask students to self-assess their proficiency with analytical tools used in the real estate profession.</p>
<p>Learning Outcome #3: Students can communicate their knowledge and analysis of real estate projects through public speaking, data visualization, and written communication.</p>
<p>Concepts: Students can write clear and succinct reports, create compelling tables and data visualizations, and speak clearly and persuasively in professional communications.</p>
<p>Competencies: Students will demonstrate the capacity to communicate clearly and efficiently through multiple media and to diverse audiences.</p>
<p>Assessment Methods: This outcome will be assessed in the Capstone course portfolio and an Exit Survey distributed to graduating students.</p>



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<p>Measures: Direct Measurement: we will develop an analytic rubric to assess the clarity and persuasiveness of various communication modes as part of the final Capstone project. Jurors will be asked to rate student performance in the Capstone project presentation. Indirect Measurement: students will be asked to self-assess their attainment of this outcome in an exit survey.</p>
<p>Learning Outcome #4: Students can evaluate the social, environmental, and financial impact of the real estate industry on society, and the ethical considerations facing real estate professionals.</p>
<p>Concepts: Students can evaluate how real estate affects urban development patterns, social stratification, the environment, and local economies, as well as ethical considerations in real estate.</p>
<p>Competencies: Students will analyze the ethical implications real-world real estate projects and practice, with a specific focus on evaluating the larger impacts on society, the economy, and the environment.</p>
<p>Assessment Methods: We will assess this outcome in the Capstone course and an Exit Survey distributed to graduating students.</p>
<p>Measures: Direct Measurement: we will use an analytic rubric to evaluate students’ knowledge of ethical standards in real estate and their assessment of the broader impacts of a real estate project during Capstone course portfolio. Indirect Measurement: students will be asked to self-assess their attainment of this outcome in an exit survey.</p>

VII. PROGRAM ASSESSMENT PLAN-

Assessment Measure	Source(s) of Evidence	Data Collection Point(s)
In Program:		
Annual student satisfaction/exit survey	Course evaluations (TCEs)	Every academic year
Rubrics (RED 407; RED 498 capstone; RED 4XX)	Student surveys	Every semester courses are offered
Academic Program Review	Rubric scoring system	Every 7 years
After Completion of Major:	Reviewers’ responses	Every year with graduating class
Job Placement Statistics		
	Student/Alumni survey	At graduation and as part of alumni survey (2-5 years post-graduation)

VIII. ANTICIPATED STUDENT ENROLLMENT-complete the table below. What concrete evidence/data was used to arrive at the numbers?

5-YEAR PROJECTED ANNUAL ENROLLMENT					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Number of Students	50	97	145	200	200

Data/evidence used to determine projected enrollment numbers:



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1. We plan to limit our initial cohort to 50 freshmen into the program in Y1, to manage enrollment, section size, and the number of faculty required. By Y4, we anticipate the incoming class size will grow to 70 students. During the first few years we will reassess whether it is feasible to admit more freshman and to allow students to allow sophomores and juniors into the major, including the impacts on class sizes, student success, staff, and faculty capacity.
2. Based on this plan, we project the following enrollment trends based on UA year-to-year retention rates:

Declared Majors	Y1	Y2	Y3	Y4
F	50	55	60	70
S	0	42	48	50
J		0	37	45
S			0	35
Total	50	97	145	200

3. Our survey of current real estate minors at UArizona indicates that about 50 would have enrolled in the major as a freshman.
4. We are confident there is sufficient demand to support these enrollments based on our most recent market research for three other programs, including the following. If we consider the relative enrolled students as a proportion of the total enrolled undergraduates on each campus, a conservatively low estimate for the program size, relative to the campus size, would be 0.75%. For the UArizona campus, with 36,503 undergraduates, this estimate suggests a program enrollment of around 274 students. In our forecasting and budgeting analysis, we assumed a conservatively slower enrollment rate at roughly 75% of this rate.

Program	Current number of enrolled students	Estimated proportion of enrolled program students to total campus undergraduates
University of Washington, BS in Real Estate	250 (winter 2020 launch)	0.75% (and growing)
University of Southern California, BS in Real Estate Development	350	1.67%
University of Wisconsin, BBA in Real Estate and Urban Land Economics	582	1.73%
Tulane University, BS in Real Estate	120 (2020 launch)	1.40% (and growing)

IX. **ANTICIPATED DEGREES AWARDED-** complete the table below, beginning with the first year in which degrees will be awarded. How did you arrive at these numbers? Take into consideration departmental retention rates. Use [National Center for Education Statistics College Navigator](#) to find program completion information of peer institutions offering the same or a similar program.



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PROJECTED DEGREES AWARDED ANNUALLY					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Number of Degrees				35	35

Data/evidence used to determine the number of anticipated degrees awarded annually:

Graduation rates were identified here: <https://uair.arizona.edu/content/retention-and-graduation>

This projection was produced by applying current UArizona 4-year graduation rates of 49.9%, respectively, to the projected freshman cohorts. With an annual enrollment of 70 new freshmen per year, we anticipate 35 graduates per cohort once the program is deployed. Five-year and six-year graduation rates are 62.0% and 67.9%, respectively, so we anticipate the number of degrees awarded for the existing cohorts planned to be slightly larger. Note that our enrollment assumptions considered conservatively low estimates of total potential enrollment (see VIII. Response #4). As we hit these benchmarks, we anticipate reviewing these assumptions and considering expanding our program from there.



**New Academic Program
PEER COMPARISON**

Program name, degree, and institution	Proposed UA Program	University of Washington, BS in Real Estate	University of Southern California, BS in Real Estate Development	University of Wisconsin, BBA in Real Estate and Urban Land Economics	Tulane University, BS in Real Estate
Current number of students enrolled		250 (program launched in Winter 2020)	350	582	120 (est. program launched in 2020)
Program Description	<p>Today’s real estate professionals must succeed across the “triple bottom line,” ensuring their work is financially, socially, and environmentally sound. Not only must their projects meet these goals, but they are responsible to those who invest, live, and work in and around their properties. Consequently, students wishing to work in real estate must learn to anticipate their work's economic, social, and</p>	<p>Housed in the College of Built Environments, the Bachelor of Science with a Major in Real Estate is designed to provide students with comprehensive exposure to the field of real estate.</p>	<p>Housed in the Sol Price School of Public Policy, the Bachelor of Science in Real Estate Development teaches all facets of real estate development, finance, and investment while simultaneously providing students with a solid understanding of the broader context in which real estate operates.</p>	<p>Housed in the School of Business, the goal of the BBA in Real Estate and Urban Land Economics is to teach students how to comprehensively underwrite commercial real estate, which is broad-based and follows the education thought leadership of James A. Graaskamp, who expressed that “Real estate should be taught as a process of dynamic interactions rather than functional and historical facts.”</p>	<p>Housed in a College of Architecture, the Bachelor of Science in Real Estate is a comprehensive undergraduate major that teaches all facets of real estate, including design and related environmental concerns. Students can complete the degree as a 4+1 program, earning an additional Master of Sustainable Real Estate Development.</p>

	<p>environmental implications and effectively manage them in cooperation with urban planners, designers, engineers, investors, lenders, stakeholders, and politicians. Students will graduate with the skills necessary to oversee real estate projects that respond to the complex challenges facing the built environment, including public health, climate change, financial risk, affordable housing, displacement, and more. This program is designed to teach students to maximize positive social and environmental outcomes during profitable real estate management, sales, investing, and development.</p>				
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Target Careers	Real Estate Finance, Asset Management, Brokerage, Urban and Real Estate Development, Regional and City planning, or Housing	Real Estate Finance, Asset Management, Brokerage, Urban and Real Estate Development, or Housing	Finance and Capital Markets, Regional and City planning, Environmental Regulation, Architectural Design, and Public Policy	Commercial Real Estate Financing and Valuation, Development and Construction, Real Estate Private Equity Investment, Asset and Portfolio Management and Brokerage, Corporate Real Estate	Real estate investment, financial analysis, project design and development, asset and portfolio management, and urban planning and policy
Emphases? (Yes/No) List, if applicable	no	no	no	no	no
Minimum # of units required	120	130	123	120	120
Level of Math required (if applicable)	Moderate	Moderate-High: Calculus	Moderate: Statistics	Moderate-High: Calculus	Moderate-High: Calculus (Gen ed requirement).
Level of Second Language required (if applicable)	2 nd semester	n/a	n/a	n/a	n/a
Pre-Major? (Yes/No) If yes, provide requirements.	no	no	no	no	no
Special requirements to declare/gain admission? (i.e. pre-requisites, GPA, application, etc.)	none	Must complete Intro to Real Estate course with a minimum grade of 2.0	Pre-requisites: ECON 203g Principles of Microeconomics and Math 177g Introduction to Mathematics for Business and Economics	Must apply and be admitted to the School of Business.	none
Internship, practicum, or	Yes. Complete 4 units:	no	Mandatory 3-credit internship with a real estate firm	no	Internship possible as elective, but not required.

applied/experiential requirements? If yes, describe.	-RED 498 Real Estate Capstone				
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Additional questions:

1. How does the proposed program align with peer programs? Briefly summarize the similarities between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc.

The two programs that are closest peers to our proposed degree, those at the University of Washington and Tulane University, are similarly housed in interdisciplinary design schools. In these programs, the faculty backgrounds are like those currently in CAPLA, which we plan to strengthen with future tenure-line hires we outline in our proposal. These faculties include lines with urban planning and policy expertise, architecture, landscape architecture, and housing economics. Our curriculum is particularly aligned with the Tulane program, which has an emphasis on sustainability and green building. We anticipate attracting similar students as these programs, specifically those who have combined interests in business and the built environment.

The core of our proposed curriculum is like all the peer programs. Specifically, each of these degrees require that students take a combination of law, planning, finance, and methods courses. Although where and how these courses are taught varies from program to program, they expose students to the fundamental skills and concepts central to real estate practice.

2. How does the proposed program stand out or differ from peer programs? Briefly summarize the differences between the proposed program and peers, which could include curriculum, overall themes, faculty expertise, intended audience, etc.

Even though the programs at UW and Tulane offer similar curricula to our proposed program, our central focus on responsible real estate concepts sets us apart. Our program will offer the country's most rigorous undergraduate real estate curriculum, including courses in finance, architecture and design, and planning. In addition, our program will expose students to courses in ethics, urban history, sustainable design, and public communication. While some of the peer programs offer similar courses, our curriculum is the most expansive and focuses strongly on responsible real estate themes.

3. How do these differences make this program more applicable to the target student population and/or a better fit for the University of Arizona?

We designed this program to take advantage of and strengthen our college's expertise in various aspects of the built environment. This will benefit our college and, by extension, the university and in doing so, provide students with a cutting-edge real estate education. Based on our comparisons, we expect robust enrollment in the program. And because our program is distinct both from offerings at our peer institutions and existing undergraduate programs at the University of Arizona, we anticipate that most of this growth will come from new students enrolling in the university.

Request to Establish New Academic Program in Arizona

University: University of Arizona

Name of Proposed Academic Program: Bachelor of Real Estate					
Academic Department: Planning Department					
Geographic Site: Tucson - Main					
Instructional Modality: In-Person					
Total Credit Hours: 120					
Proposed Inception Term: Fall 2024					
<p>Brief Program Description:</p> <p>Today's real estate professionals must succeed across the "triple bottom line," ensuring their work is financially, socially, and environmentally sound. Not only must their projects meet these goals, but they are responsible to those who invest, live, and work in and around their properties. Consequently, students wishing to work in real estate must learn to anticipate their work's economic, social, and environmental implications and effectively manage them in cooperation with urban planners, designers, engineers, investors, lenders, stakeholders, and politicians. Students will graduate with the skills necessary to oversee real estate projects that respond to the complex challenges facing the built environment, including public health, climate change, financial risk, affordable housing, displacement, and more. This program is designed to teach students to maximize positive social and environmental outcomes during profitable real estate management, sales, investing, and development.</p>					
<p>Learning Outcomes and Assessment Plan:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Learning Outcome #1: Students will apply their knowledge of key real estate concepts to professional scenarios and projects.</td> </tr> <tr> <td style="padding: 5px;">Concepts: Students will explain the components of real estate supply and demand, the history of the real estate industry, the ecological impact of the built environment, and key legal concepts important to regulation of real property.</td> </tr> <tr> <td style="padding: 5px;">Competencies: Students will apply this knowledge to analyze applied professional scenarios and real estate projects.</td> </tr> <tr> <td style="padding: 5px;">Assessment Methods: We will assess this learning outcome through student projects in two courses, RED 407 Survey of Responsible Real Estate, RED 498 Real Estate Capstone, and through an Exit Survey we will distribute to graduating students.</td> </tr> <tr> <td style="padding: 5px;">Measures: Direct measurement: In RED 407 and RED 498, we will use a rubric that measures students' fundamental knowledge and application of key real estate concepts</td> </tr> </table>	Learning Outcome #1: Students will apply their knowledge of key real estate concepts to professional scenarios and projects.	Concepts: Students will explain the components of real estate supply and demand, the history of the real estate industry, the ecological impact of the built environment, and key legal concepts important to regulation of real property.	Competencies: Students will apply this knowledge to analyze applied professional scenarios and real estate projects.	Assessment Methods: We will assess this learning outcome through student projects in two courses, RED 407 Survey of Responsible Real Estate, RED 498 Real Estate Capstone, and through an Exit Survey we will distribute to graduating students.	Measures: Direct measurement: In RED 407 and RED 498, we will use a rubric that measures students' fundamental knowledge and application of key real estate concepts
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<p>in their final project. Indirect measurement: In the exit survey, we will ask students to self-assess their knowledge of key real estate concepts.</p>
<p>Learning Outcome #2: Students will employ the analytical tools commonly used in real estate practice.</p>
<p>Concepts: Students will be able to analyze the financial, environmental, and social impact of real estate projects, as well as estimate the demographic and socio-economic drivers of demand for real estate.</p>
<p>Competencies: Students will apply the methods to assess the financial, economic, environmental, and demographic impact of real estate in real-world contexts.</p>
<p>Assessment Methods: We will assess this learning outcome through a student project in the terminal course in the program's methods sequence, RED 4XX Advanced Quantitative Methods and Market Analysis, and through an Exit Survey we will distribute to graduating students.</p>
<p>Measures: Direct measurement: In RED 4XXX (Advanced Quantitative Methods and Market Analysis), we will use a rubric to assess students' ability to apply analytical tools to assess real estate projects, this will include assessment of acumen with metrics used to assess the financial, demographic, and ecological impact of real estate projects. Indirect measurement: In the exit survey, we will ask students to self-assess their proficiency with analytical tools used in the real estate profession.</p>
<p>Learning Outcome #3: Students can communicate their knowledge and analysis of real estate projects through public speaking, data visualization, and written communication.</p>
<p>Concepts: Students can write clear and succinct reports, create compelling tables and data visualizations, and speak clearly and persuasively in professional communications.</p>
<p>Competencies: Students will demonstrate the capacity to communicate clearly and efficiently through multiple media and to diverse audiences.</p>
<p>Assessment Methods: This outcome will be assessed in the Capstone course portfolio and an Exit Survey distributed to graduating students.</p>
<p>Measures: Direct Measurement: we will develop an analytic rubric to assess the clarity and persuasiveness of various communication modes as part of the final Capstone project. Jurors will be asked to rate student performance in the Capstone project presentation. Indirect Measurement: students will be asked to self-assess their attainment of this outcome in an exit survey.</p>
<p>Learning Outcome #4: Students can evaluate the social, environmental, and financial impact of the real estate industry on society, and the ethical considerations facing real estate professionals.</p>
<p>Concepts: Students can evaluate how real estate affects urban development patterns, social stratification, the environment, and local economies, as well as ethical considerations in real estate.</p>
<p>Competencies: Students will analyze the ethical implications real-world real estate projects and practice, with a specific focus on evaluating the larger impacts on society, the economy, and the environment.</p>
<p>Assessment Methods: We will assess this outcome in the Capstone course and an Exit Survey distributed to graduating students.</p>
<p>Measures: Direct Measurement: we will use an analytic rubric to evaluate students' knowledge of ethical standards in real estate and their assessment of the broader impacts of a real estate project during Capstone course portfolio. Indirect Measurement: students will be asked to self-assess their attainment of this outcome in an exit survey.</p>

Assessment Measure	Source(s) of Evidence	Data Collection Point(s)
In Program:		
Annual student satisfaction/exit survey	Course evaluations (TCEs)	Every semester
Rubrics (RED 407; RED 498 capstone; RED 4XXX)	Student surveys	Every year with graduating class
Academic Program Review	Rubric scoring system	Every year with graduating class
After Completion of Major:	Reviewers' responses	Every 7 years
Job Placement Statistics		
	Student/Alumni survey	At graduation and as part of alumni survey (2-5 years post-graduation)

Projected Enrollment for the First Three Years:

	1 st Year	2 nd Year	3 rd Year
Number of Students	50	97	145

Evidence of Market Demand:

In the fall of 2022, CAPLA hired the higher education consulting firm Hanover Research to conduct a market study estimating the external demand for a Bachelor's in Real Estate program. Their analysis indicated that the real estate development sector in Arizona and nationally has a strong employment rate and high demand. Additionally, they identified the potential for employment growth over time across Arizona and the nation.

According to Hanover's analysis, employers in the southwest region advertised more than 1,200 real estate-related jobs over the last six months, as of December 2022. These include postings for property managers (170), investment analysts (93), and construction managers (65). Given the lack of a competitive real estate program in the state, we expect graduates of the BRE program will be competitive applicants for these positions.

Additional evidence demonstrating the need for the real estate program comes from local and regional employers and business owners. Many letters of support from Tucson's real estate industry leaders were presented in the proposal for the Minor in Real Estate Development. These testimonials offer insight into industry needs for graduates who are prepared to enter the field of real estate development.

Similar Programs Offered at Arizona Public Universities:

ASU – Minor in Real Estate

University of Arizona synergistic programs:

Master of Real Estate Development (shared courses, AMP opportunities)

Master of Science in Urban Planning (shared courses, AMP opportunities)

Objection(s) Raised by Another Arizona Public University? YES NO

Has another Arizona public university lodged a written objection to the proposed program with the proposing university and the Board of Regents within seven days of receiving notice of the proposed program?

If Yes, Response to Objections:

Please provide details of how the proposing university has addressed the objection. If the objection remains unresolved, please explain why it is in the best interests of the university system and the state that the Board override it.

New Resources Required? (i.e. faculty and administrative positions; infrastructure, etc.):

The program will require growth in both faculty and staff as follows. No reassignments or extensions are planned. All program requirements will be funded by program revenues to avoid impact on other programs. New faculty will positively impact other programs by teaching courses available to students inside and outside the college.

FTE required (cumulative)	Year 1	Year 2	Year 3	Year 4
TT Faculty	0	1	2	3
CT Faculty	.5	.5	1.0	1.7
Program Mgt.	1.0	1.0	1.0	1.0
Additional FTE identified for anticipated college staff hires	0.1	0.7	1.3	1.4

Plan to Request Program Fee/Differentiated Tuition? YES **NO**

Estimated Amount: N/A

Program Fee Justification: N/A

Specialized Accreditation? YES **NO**

Accreditor:
 N/A

 **THE UNIVERSITY OF ARIZONA**
BUDGET PROJECTION FORM

Name of Proposed Program or Unit: Bachelor in Real Estate Development

Budget Contact Person: Simon White	Projected			
	1st Year	2nd Year	3rd Year	4th Year
	2024 - 2025	2025 - 2026	2026 - 2027	2027 - 2028
METRICS				
Net increase in annual college enrollment UG	50	97	145	200
Net increase in college SCH UG	200	900	1,839	2,859
Net increase in annual college enrollment Grad				
Net increase in college SCH Grad				
Number of enrollments being charged a Program Fee	50	97	145	200
New Sponsored Activity (MTDC)				
Number of Faculty FTE	1.50	3.50	6.00	8.70
FUNDING SOURCES				
<u>Continuing Sources</u>				
UG AIB SCH Revenue	38,600	177,400	369,600	586,100
UG AIB Major Revenue	35,700	70,600	107,600	151,200
UG AIB Degree Revenue	-	-	-	113,600
Grad RCM Revenue				
Program Fee RCM Revenue	54,300	105,400	157,500	217,300
F and A Revenues				
UA Online Revenues				
Distance Learning Revenues				
Reallocation from existing College funds (attach description)				
Other Items (attach description)				
Total Continuing	\$ 128,600	\$ 353,400	\$ 634,700	\$ 1,068,200
<u>One-time Sources</u>				
College fund balances				
Institutional Strategic Investment				
Gift Funding				
Other Items (attach description)				
Total One-time	\$ -	\$ -	\$ -	\$ -
TOTAL SOURCES	\$ 128,600	\$ 353,400	\$ 634,700	\$ 1,068,200
EXPENDITURE ITEMS				
<u>Continuing Expenditures</u>				
Faculty	33,200	150,500	307,000	483,700
Other Personnel	66,700	103,900	142,500	151,800
Employee Related Expense	32,000	81,400	143,800	203,400
Graduate Assistantships	18,900	38,600	59,100	80,400
Other Graduate Aid				
Operations (materials, supplies, phones, etc.)	36,500	42,000	53,000	71,000
Additional Space Cost				
Other Items (attach description)				
Total Continuing	\$ 187,300	\$ 416,400	\$ 705,400	\$ 990,300
<u>One-time Expenditures</u>				
Construction or Renovation				
Start-up Equipment		10,000	20,000	30,000
Replace Equipment				
Library Resources				
Other Items - Course Build	12,000	12,200	-	-
Total One-time	\$ 12,000	\$ 22,200	\$ 20,000	\$ 30,000
TOTAL EXPENDITURES	\$ 199,300	\$ 438,600	\$ 725,400	\$ 1,020,300
Net Projected Fiscal Effect	\$ (70,700)	\$ (85,200)	\$ (90,700)	\$ 47,900



THE UNIVERSITY OF ARIZONA
James E. Rogers
College of Law

Keith Swisher
1201 East Speedway
P.O. Box 210176
Tucson, AZ 85721-0176
Tel: 520-626-8373
keithswisher@arizona.edu

March 23, 2023

Delivered electronically

Re: Letter of Support for New Real Estate Major

Dear Professor Johnson:

We approve of the use of Law 454: Environmental Law and Policy and Law 416: Introduction to Business Organizations Law as elective options in the curriculum of the proposed School of Landscape Architecture and Planning Bachelor of Real Estate major and will work to ensure that seats will be available for those students. Additionally, we support the creation of this degree program.

Please let me know if you could use any additional information.

Sincerely,

Prof. Keith Swisher
Director, BA in Law and MLS Programs





DEPARTMENT OF
PHILOSOPHY

Social Sciences Building 27
1145 E South Campus Dr
Room 213

Tucson, AZ 85721-0027

Ofc: 520-621-5045

Fax: 520-621-9559

Philosophy.arizona.edu

April 4, 2023

To Whom It May Concern:

I approve use of the following courses for the proposed School of Landscape Architecture and Planning major degree, Bachelor of Real Estate, and can work to assure you that seats will be available.

- PHIL 210 (3) Moral Thinking
- PHIL 323 (3) Environmental Ethics
- PHIL 322 (3) Business Ethics

Additionally, I support the creation of this degree program.

I appreciate your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Thomas Christiano'.

Dr. Thomas Christiano
Department Head, Dept of Philosophy





THE UNIVERSITY OF ARIZONA

College of Architecture, Planning
& Landscape Architecture

SCHOOL OF ARCHITECTURE | 520-621-6752 | arch@arizona.edu

08 May 2023

To Whom It May Concern:

I approve the use of the following elective course for the proposed School of Landscape Architecture and Planning major degree, Bachelor of Real Estate, and will work to make seats available.

- ARC 471S (3) Contemporary Architecture and Urban Theory

Additionally, I support the creation of this degree program and the use of other electives that will be identified as appropriate for the future.

Sincerely,

Ryan E. Smith, Director
School of Architecture
CAPLA

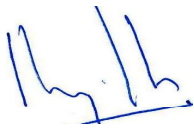
DATE: June 5, 2023

To Whom It May Concern:

I approve use of ACCT 250: Survey of Accounting as an elective option in the curriculum of the proposed School of Landscape Architecture and Planning, Bachelor of Real Estate major and will work to ensure that seats will be available for these students. Additionally, I support the creation of this degree program.

I appreciate your consideration.

Sincerely,



Dr. Shyam Sunder
Director, Dhaliwal-Reidy School of Accountancy