

June 2018

PROGRAM ASSESSMENT REPORT

EXECUTIVE MASTER OF REAL ESTATE DEVELOPMENT

The Master of Real Estate Development program (MRED) is a non-thesis based executive graduate program which requires 39 semester credit hours to complete. The program is a joint-venture between the College of Architecture, Design, and Construction and the Harbert College of Business. It is delivered via a blended educational model of six one-week residencies on campus, synchronous and asynchronous distance learning sessions, and experiential national and international field study programs throughout the curriculum.

The program faculty are from three different colleges at Auburn University; the MRED program also utilizes faculty from other universities and regional industry executives as adjunct faculty. Faculty hold a meeting during the August residency when the most number of faculty members are on campus at the same time. Otherwise, the Director reviews program issues with each faculty member directly, in small groups, or in conference sessions using Zoom technology.

The MRED program has enrolled students since 2010. The average number of students enrolled in the program has been 17 per year with the actual numbers varying between 13 to 21 students per year.

Enrollment Numbers for the last five years:

| YEAR | <i>2014</i> | <i>2015</i> | <i>2016</i> | <i>2017</i> | <i>2018</i> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| ENROLLMENT | <i>19</i> | <i>16</i> | <i>19</i> | <i>21</i> | <i>13</i> |

Again, the MRED program is an executive program delivered in a blended residential/field study/distance format. Our students work full-time in their home places of residency while they are enrolled in the program. A one-week residency occurs at the beginning of each of the six semesters, and field trips occur in five of the six semesters. The remainder of the course content is delivered in high production video lectures embedded in the Canvas courses and via scheduled webinars using Zoom technology. The curriculum is a 39 credit-hour program taken over six straight semesters comprising two years of coursework.

There are no prerequisites for the program. However, students enrolling in the program must have at least three years of post-baccalaureate professional experience in real estate development or five years of post-baccalaureate professional experience in a related field. Of the ten classes entered to date, our students have an average 12 years of professional experience. Many of our students hold professional registrations: architects, landscape architects, professional engineers, appraisers, Certified Commercial Investment Managers,

commercial building contractors, residential and commercial real estate brokers, member of the Appraisal Institute Designation (MAI), accountants, and attorneys at law, among others.

The MRED program does not offer any options or tracks and is therefore a lock-step curriculum.

Program Vision

The vision of the MRED Program at Auburn University is to build real estate development leaders through: engaged classroom and distance learning, experiential learning on field studies and outreach projects, active collaboration with industry, and entrepreneurial simulations in case studies and capstone projects. The MRED program also applies the knowledge of the faculty, students, Alumni, and Advisory Board members in efforts to educate the public about best development practices through public lectures, panel discussions, symposia, and other outreach activities.

The MRED program is: developing an RFP process to encourage academic research in the field of real estate development, considering the creation of a Visiting Scholar program, and beginning to undertake outreach projects. In addition, the MRED program is offering continuing education courses for industry trade organizations' credits such as CCIM and certification for licensing of real estate sales and brokerage.

The Master of Real Estate Development degree will enable the student to:

- Understand and employ a collaborative and multi-disciplinary approach to real estate development.
- Utilize the combined strengths of the two participating colleges: The College of Architecture, Design, and Construction and the Raymond J. Harbert College of Business. The combined strengths include best practices in the areas of business, physical planning, design, and construction.
- Understand the complexity of mixed-use development through experiential exposure to innovative models and professional practices
- Understand real estate development practices needed to create sustainable and socially responsible developments.
- Understand and address specific challenges facing real estate development professionals in Alabama and the Southeastern region, while also offering direct experience in other parts of the US and abroad.
- Understand the complex legal, financial, and deal structures structures that form real estate development project.
- Understand the dynamics of public and private debt and equity markets

Student Learning Outcomes

As recommended in the 2016 Assessment feedback, the MRED Program is in the process of further articulating our program level student learning outcomes. As part of this process, the faculty are reworking the program goals, objectives, and student learning outcomes that capture the specific content, skills, and abilities expected of our graduates.

1. Specific Outcomes

Student Learning Outcome 1: Principles of Real Estate Development

Students, graduating with an MRED degree, will demonstrate knowledge and command of the basic principles of real estate development.

| Student Learning Outcome 1 Elements | |
|-------------------------------------|--|
| 1.1 | Recognized and define the basic language of real estate development. |
| 1.2 | Apply written, oral, and visual media to communicate effectively in diverse settings. |
| 1.3 | Organize and compose resolutions to complex design, construction, and development problem. |
| 1.4 | Apply basic financial principles of real estate markets, mortgages, valuation, interest rate determination, yield curves, and borrowing/lending decision criteria. |
| 1.5 | Identify and evaluate the range of appropriate partnership entities used to implement real estate development projects. |
| 1.6 | Identify and apply essential negotiating skills required for real estate development. |

Student Learning Outcome 2: Comprehensive Real Estate Feasibility Analysis

Students, graduating with an MRED degree, will demonstrate proficiencies in the preparation of a comprehensive real estate development feasibility study and the creation of a mixed-use development project for a specific site.

Student Learning Outcome 2 Elements

2.1 Place-Based Design and Sustainability: Demonstrates a vocabulary appropriate for the design and construction industry. Identify and describe basics principles of high performance buildings including sustainable issues and low impact development principles. Design the proposed facility. Identify and apply livable city, walkable streets, and other place-based strategies into development plans.

2.2 Site Conditions: Implements a vocabulary of site development appropriate to the profession; site is assessed at a level appropriate for the project. Create solutions for specific site issues such as: site orientation and views; storm water flow analysis; slope and aspect analysis; vegetative cover analysis; soils analysis; pedestrian flow analysis; and traffic and transportation analysis.

2.3 Due Diligence: Analyze the development potential by interpreting and applying elements of the regulatory environment in which the project is to be developed.

2.4 Scope/Costs: Define scope and costs for local markets and site conditions.

2.5 Sequencing and Scheduling: Create a schedule for development, including delivery methods, timetables, and major project milestones. Analyze sequencing options for different types of building construction components.

2.6 Trade-Offs: Identify and analyze potential tradeoffs required in the design and construction process.

2.7 Risk Management: Identify and assess major risks for design and construction and determine appropriate mitigated procedures.

2.8 Change Management: Demonstrate clear knowledge and understanding of cash flow and the closeout project process.

2.9 Procurement and Delivery: Identify procurement, delivery, and contracting approaches for the project.

2.10 Development Program and Market Study: Prepare a development program and market study for proposed projects.

2.11 Financial Analysis: Organize and develop a full financial analysis, evaluate current capital markets, and design appropriate business structures for the proposed development project.

2.12 Urban Design and Engineering Parameters: Evaluate, critique, and contribute to urban design and engineering of the proposed development project.

2.13 Reporting: Prepare project proposals and technical reports using appropriate technologies.

2.14 Presenting: Prepare and present project presentations using appropriate technologies.

2. Comprehensive Outcomes

The current student learning outcomes (SLO) presented are moving toward becoming comprehensive. A consensus vote of the MRED Curriculum Committee at a workshop in August 2017 adopted new SLOs. The Advisory Board and Alumni Council have been presented with the draft SLOs in May and have reviewed and commented on the new SLOs. The faculty, Advisory Board, and Alumni Council comments have been incorporated into this report.

3. Communicating Outcomes

Upon completion of this assessment report, it will be distributed to faculty on a special Canvas Course set up for faculty to review and comment in discussion threads. The report will also be distributed to MRED Advisory Board and Alumni Council members prior to our Faculty meetings in August 2018.

The incoming Class of 2020, entering in Mid-May 2018, have been provided with a copy of the program vision and student learning outcome during their orientation session on their first day of class. The second-year class of 2019 were also provided a draft of this document during our May 2018 residency.

It is our plan to again issue the program vision and learning outcome statement to students at the beginning of their final semester and to collect their feedback on each learning outcome.

4. Curriculum Map

A curriculum map is provided, and the following table depicts the alignment between student learning outcomes with required course/experiences. The following abbreviations are used in the table:

- I: Course(s) where a particular SLO is first **introduced**
- M: Course(s) where a particular SLO is **mastered**
- R: Course(s) where a particular SLO is **reinforced**
- A: Course(s) where a particular SLO is **assessed**

Student Learning Outcome 1

| Courses | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| RDEV 7136 Principles RED | I/M | I/M | | I/M | I | |
| RDED 7146 Real Property | I/M | I/M | I/M | I/M | I | I |
| REDEV 7126 Field Study I | | I/M | I/M | I/M | | |
| RDEV 7356 Investment | I/M | I/M | | M/R/A | I/M | |
| RDEV 7546 RED Law | I/M | I/R | | | M/R/A | I |
| RDEV 7246 Project Mgmt. | | M/R | M/R | | I/M | I |
| RDEV 7236 Market Analysis | I/M/R | M/R | | M/R/A | | |
| RDEV 7126 Field Study 2 | | I/R | R | I/M | | |
| RDEV 7346 Site Planning ID | M/R/A | M/R | M/R/A | | | |
| RDEV 7246 Design & Construction | I/M | I/M | M/R/A | | | I |
| RDEV 7536 Securitization | | M/R/A | M/R | | M/R/A | |
| RDEV 7126 Field Study 3 | | R | R | I/M | | |
| RDEV 7636 Capstone | M/R/A | R/A | M/R/A | M/R/A | | R |
| RDEV 7446 Negotiations | | I//M | R/A | | | |
| RDEV 7126 Field Study 4 | | R | R | I/R/M | | M/R/A |
| RDEV 7126 Field Study 5 | | R | R | I/R/M | | |
| RDEV 7126 Filed Study 6 | | R | R | I/R/M | | |

Student Learning Outcome 2

| COURSES | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-----|
| RDEV 7136 Principles RED | | | I | | | | |
| RDED 7146 Real Property | I | I | I/M | I | I | I | |
| RDEV 7126 Field Study I | | I | | | | | |
| RDEV 7356 Investment | | | | | | | |
| RDEV 7546 RED Law | I/M | | | | | | |
| RDEV 7246 Project Mgmt. | I | I | I/M | I/M/R | I/M/R | M/R/A | I/M |
| RDEV 7236 Market Analysis | | | | | | | |
| RDEV 7126 Field Study 2 | | I | | | | | |
| RDEV 7346 Site Planning ID | I/M/R | I/M/R | I/M/R | I/M/R | I/M/R | M/R/A | I |
| RDEV 7246 Design & Construction | I/M/R | I/M/R | I/M/R | I/M/R | I/M/R | M/R/A | I/M |
| RDEV 7536 Securitization | | | | | | | |
| RDEV 7126 Field Study 3 | | M/R | I | | | | |
| RDEV 7636 Capstone | R/A | R/A | R/A | R/A | R/A | R | R |
| RDEV 7446 Negotiations | | | | | | | |
| RDEV 7126 Field Study 4 | | M/R | | | | | |
| RDEV 7126 Field Study 5 | | M/R | | | | | |
| RDEV 7126 Field Study 5 | | M/R | | | | | |

| Student Learning Outcome 2 | | | Continued | | | | |
|----------------------------|-------|-------|-----------|-------|-------|-------|------|
| COURSES | 2.8 | 2.9 | 2.10 | 2.11 | 2.12 | 2.13 | 2.14 |
| RDEV 7136 Principles RED | I | I | I/M | I | | | |
| RDED 7146 Real Property | I | I | I/M | I/M | | | |
| RDEV 7126 Field Study I | | | I | | I | I | I |
| RDEV 7356 Investment | | | M/R/A | | | | |
| RDEV 7546 RED Law | | I/M | I/M | | | | |
| RDEV 7246 Project Mgmt. | M/R/A | M/R/A | I/M | I | I | M | M |
| RDEV 7236 Market Analysis | | M/R/A | I | | M | M | |
| RDEV 7126 Field Study 2 | | | | | I | I | I |
| RDEV 7346 Site Planning ID | I | I/M | I | | I/M/R | | |
| RDEV 7246 Design & Const. | I/M/R | I/M | I | | I/M/R | | |
| RDEV 7536 Securitization | | | | M/R/A | M/R/A | | |
| RDEV 7126 Field Study 3 | | | I | | I | I | I |
| RDEV 7636 Capstone | | R/A | R/A | R/A | M/R/A | M/R/A | |
| RDEV 7446 Negotiations | | | | | | | |
| RDEV 7126 Field Study 4 | | | I | | I | I | I |
| RDEV 7126 Field Study 5 | | | I | | I | I | I |
| RDEV 7126 Field Study 5 | | | I | | I | I | I |

5. Outcome-Measure Alignment

The table below provides Outcome-Measure Alignment for Student Learning Outcome 2.

As an initial step in program assessment the program has decided to measure only Student Learning Outcome Two since it has had some significant changes and because it appears to be critical measures of program success.

| Learning Outcomes #2 (2.1 – 2.14) | | |
|---|-----------------|---|
| Assessment Measure | Type of Measure | Data Collection Process |
| Capstone RFP (Industry) | Direct | The final assessment is based on both group and individual performance. A grading rubric is used. The final assessment is made by the course instructors (2-3 faculty) after review of the grades and comments made an Executive Industry Review Panel made up of four or five nationally-known industry leaders. |
| Capstone RFP (Faculty) | Direct | MRED faculty will be asked to fill out a similar assessment survey (see rubric below) as the Executive Industry Review Panel to evaluate if each student has met the learning outcomes outlined in Objectives 2 at the end of the program. |
| Exit Survey (planned but not implemented) | Indirect | An Exit Survey will be sent to all participating Capstone students in mid-May 2019. Students will be asked how strongly they agree that they have met the sub-learning outcomes in Learning Outcome 1 and sub-learning outcomes in Learning Outcome 2. |

6. Direct Measures

For Student Learning Objective 2, a detailed assessment rubric has been used (see below) to evaluate the Capstone Project occurring as the last course in the curriculum. The rubric is based on independent evaluation of a detailed written proposal submitted by small groups of students and then presented to course faculty and an Executive Industry Review Panel comprised of leading industry executives.

7. Data Collection

CAPSTONE RFP (Industry & Faculty): For Student Learning Objective 2, students were asked to respond to a “Request for Proposal” for the development of a property currently in the early stages of the development process by a private developer, or municipal or state authority. Once proposals are received, they are distributed to three MRED faculty and to four or five industry leaders for review and comments several weeks before the Final Presentations of the Capstone Projects.

Students then make a professional presentation of their projects to course faculty and members of the Industry Review Panel. The students had 20 minutes to present their projects and the reviewers had 30 minutes to ask questions.

Faculty and Reviewers were given the rubric illustrated below to fill out during and after presentations. It matches the 14-item rubric for Student Learning Outcomes 2: Comprehensive Real Estate Feasibility Analysis.

| Master of Real Estate Development- Auburn University | | | | | | |
|--|--|--|--|--|--|--|
| | 5 (includes key items used to score each item) | 4 | 3 | 2 | 1 | 0 |
| 1 Placed-based design, sustainability, and components of high performance buildings | Student clearly demonstrates a vocabulary appropriate for the design and construction industry. Basic principles of high performance buildings including sustainable issues and low impact development principles are proposed and described in appropriate detail. Student enhances the design and construction of the proposed facility. | Vocabulary for the industry is evident and appropriate throughout the report. Place making and community building are addressed. However, one or two key issues of sustainability have not been addressed. | Vocabulary for the industry is generally correct. Sustainability in the project is not addressed in one or more areas (site, structure, neighborhood, etc.) A key issue of placemaking and/or community building may also not have been addressed. | Vocabulary for the industry lacks appropriate depth and detail. The project only minimally addresses sustainability within the context of site, structure, and neighborhood. Placemaking and community building concepts are only minimally addressed. | Vocabulary for the industry is insufficient for working with professionals in the context of design and construction. The project does not sufficiently address sustainability given the context of the project and invested stakeholders. | Vocabulary of design and construction is not appropriate and/or sustainability is not addressed in the context of the project. |

| | | | | | | |
|--|---|--|---|--|--|--|
| 2 Site conditions | Student implements a vocabulary of site development appropriate for the profession; site is assessed at a level appropriate for the project; and creative solutions are proposed for specific site issues. | Vocabulary for the site is appropriate, and at least one creative or appropriate solution is clear for the major site issue(s). However, the analysis including the assessment is not well documented. | Vocabulary for the site is appropriate; however, the key site issue has not been considered at an appropriate level. | Vocabulary for the site may be lacking, and key site issues have not been identified/ assessed/ resolved. | Vocabulary for the site is insufficient for working with professionals in the context of design and construction. Site issues addressed are minimal and inappropriate given the options available. | Vocabulary of site is not appropriate, and/or site issues have not been addressed. |
| 3 Building code, zoning and other due diligence items | Student clearly demonstrates that the feasibility study includes the full regulatory environment in which the project is located. Relevant constraints and conditions of the building code, environmental regulations, zoning codes, etc. are applied in the specific context of the site and structure proposed. | One or two key constraints or conditions of applicable codes/ regulations have not been fully considered although the work is specific to the context of the site and structure proposed. | Although the code is addressed, specific application to the context of the site and structure proposed is lacking and needs further connection. The full regulatory environment may not have been considered. | The feasibility study fails to address multiple, specific areas of the regulatory environment. Details regarding the context of the site and structure are limited or not present. | The project has been developed considering only one or two of the relevant codes and/or the specific contact of site and structure have been ignored. | The project has not considered the regulatory environment. |

| | | | | | | |
|--|--|--|---|---|---|---|
| 4 Scope/Cost | A reasonable scope and cost for the local market and site conditions have been defined. Cost and scope have been addressed at a consistent level of detail that ladders easily to the define the full project. | Cost and scope are addressed but may omit one or two critical issues necessary to fully define and manage the project. | The detail of cost and scope within the proposal vary. Local conditions and/or site conditions may not be fully addressed. | Errors are apparent in the cost and/or scope of the project. Further definition of the scope may be needed to resolve the noted issues. | A disconnect exists between the scope, cost and proposed project given the specific context of the project. | Scope and cost have not been addressed in the context of the project. |
| 5 Sequencing and Scheduling | A schedule with a complete and reasonable process for development is provided including delivery methods, timetables, and major project milestones. Durations reflect realistic market conditions, and the schedule is divided and sequenced into consistent levels of detail. Evidence is provided that project can be staged in a manner to minimize disruption to surrounding properties. | A schedule with a complete and reasonable process for development is provided but may lack details in delivery methods, timetables, and major project milestones. Durations reflect realistic market conditions, and the schedule is divided and sequenced into consistent levels of detail. Evidence is provided that project can be staged in a manner to minimize disruption to surrounding properties. | A schedule with a complete process for development is provided but may have one or two key issues that will foul the process. Lack of clarity in project staging to avoid disruption may also be evident. | A schedule is provided, but it does not sufficiently divide and/or sequence items in a clear, consistent approach. The process may not be reasonable, and staging may or may not have been addressed. | A reasonable process for scheduling and/or delivery is not evident. | No schedule and/or delivery method is identified or connected to realistic market conditions. |

| | | | | | | |
|--|---|---|---|---|---|---|
| 6 Trade-offs between development, design and construction | At least two major potential tradeoffs required in the design and construction process have been identified and analyzed. A decision is made that is logical from the discussion. | At least one major potential tradeoff required in the design and construction process have been identified and analyzed. A decision is made that is logical from the discussion. | At least one major potential tradeoffs required in the design and construction process have been identified but not yet analyzed. A decision is made that is logical from the discussion. | Major potential tradeoffs required in the design and construction process have been generally discussed but not identified specifically nor analyzed. One or two key issues have been omitted or not fully addressed. | Potential tradeoffs required in the design and construction process were identified but not discussed. No decision is made that is logical from the discussion. | No tradeoff was identified nor analyzed. |
| 7 Bonds, insurance, and risk management | At least two major risks for design and construction have been clearly identified, assigned, and/or mitigated as appropriate. | At least one major risk for design and construction have been clearly identified, assigned, and/or mitigated as appropriate. | At least one major risk for design and construction have been clearly identified, with little discussion of mitigation. Presentation within the report lacks clarity. | Risks for design and construction have been generally identified with little discussion of mitigation. One or two key issues have been omitted from the presentation. | Risks for design and construction have not been clearly identified, and no potential mitigation was discussed. | No risks have been identified, assigned, nor mitigated. |
| 8 Change management, cash flow, closeout process | A process for handling change is identified for the project. Clear knowledge and understanding of cash flow and the closeout project are conveyed. | A process for handling change is identified for the project. Clear knowledge and understanding of cash flow and the closeout project are generally but not specifically conveyed. | Relevant items regarding change management are addressed, but the presentation of information within the report lacks clarity. | One or two key items necessary for change management for this project have been omitted or not fully addressed. | The process for handling change that is identified for the project is not appropriate. | No process for handling change was identified. |

| | | | | | | |
|---|--|---|--|--|--|--|
| 9 Procurement, delivery, and contracting methods | Procurement, delivery, and contracting approaches are identified and appropriate for the project. | Of the approaches outlined, one is perhaps not appropriate for the proposed project. | Of the approaches outlined, two are not appropriate for the proposed project. D12. | All three of the approaches lack connection with the proposed project. | One or more of the procurement, delivery, or contracting methods are not clearly identified. | No procurement, delivery, or contracting methods are identified. |
| 10 Market Analysis | Student implements a vocabulary of site development appropriate for the profession; site is assessed at a level appropriate for the project; and creative solutions are proposed for specific site issues. | Vocabulary for the site is appropriate, and at least one creative or appropriate solution is clear for the major site issue(s). However, the analysis is not well documented. | Vocabulary for the site is appropriate; however, the key site issue has not been considered at an appropriate level. | Vocabulary for the site may be lacking, and key site issues have not been identified/assessed/resolved. | Vocabulary for the site is insufficient for working with professionals in the context of design and construction. Site issues addressed are minimal and inappropriate given the options available. | No Market Analysis |
| 11 Financial Analysis and Deal Structuring | Set-Up and Ten Year Proformas are fully developed and indicate full project feasibility. Investment analysis, capital stacks, and appropriate business entities are utilized in structuring the deal. | Set-Up, proforma, investment analysis, deal structure is generally set up correctly. However, one oversight or omission has occurred. | Two or Three key issues are noted in either the set-up, proforma, investment analysis, capital stack, or deal structure, but an insufficient picture is laid out to understand the total financial performance of the project. | Multiple errors are present. Major revision would be needed to create a viable financial package for the proposed project. | One or more items in the financial package are not present and therefore does not present a coherent package. | No financial package was presented as a part of this proposal. |
| 12 Urban Design and | Building scale and massing are appropriate for the | One key parameter for the project | The majority of key parameters | Two or more key parameters for | Key parameters are not sufficiently | The project fails to address intended uses |

| | | | | | | |
|--|--|---|--|---|--|---|
| Engineering Parameters | intended use and site. Key parameters of parking, access and egress, and connectivity have been demonstrated in the plans and narratives. Construction means and methods are realistic, appropriate, and well-defined. | has been omitted, not fully addressed, and or not realistic or addressed. | have been discussed, but multiple key parameters have not been fully addressed. | the project have been omitted and other have not been fully addressed. | addressed or lack appropriate definition. | and site issues that would be encountered in executing the project. |
| 13 Prepare project proposals and technical reports using technology | All relevant items needed to propose this project are addressed. The proposal is presented professionally; key audience and purpose for writing is clear; content is relevant and compelling; formal and informal rules for writing within the real estate discipline are followed; solid language including appropriate graphics and headers that communicates meaning is used. | All relevant items are addressed. The proposal appears professional in nature, and the key audience and purpose for writing are clear. Issues may exist with clarity of language, word choice, graphical presentation, and/or formal and informal rules of writing. | Relevant items are addressed, but the presentation of information within the report lacks clarity. Improvement is needed in multiple areas of graphics, presentation, clarity, rules of writing, headers, etc. | One or two key items necessary for this project have been omitted or not fully addressed. Improvement is also needed in multiple areas of graphics, presentation, clarity, rules of writing, etc. | The proposal lacks professionalism or fails to address multiple items sufficient for this project. | The proposal lacks professionalism and addresses few, if any, key items for this project. |

| | | | | | | |
|---|--|--|---|---|---|---|
| 14 Prepare and present project presentation using appropriate technologies | Central message is well stated and compelling; presentation is well-organized; delivery is professional; content is well-developed and supports the presentation; language used is appropriate for the real-estate market. | All the elements of a successful presentation are present; however, execution of the presentation needs improvement in one key area. | The presentation failed to fully convey the central message and/or to develop the argument fully. Organization in the presentation may also be lacking. | The central message of the presentation is compromised because of some other factor (use of language, poor development of content, lack of organization.) | The presentation lacks a central and compelling message. Content is not well-developed. | The presentation lacks a central and compelling message. Content is not well-developed. Delivery is not professional. |
|---|--|--|---|---|---|---|

An “exit survey” will be sent to all graduating students in May 2019 so students may self-evaluate how they met identified learning outcomes. Results will be reported in next year’s report.

8. Reporting Results

Again, the program only assessed Student Learning Outcome Two, because the SLOs for Outcome One have been significantly modified and remapped against the curriculum. The MRED Program assessment results are presented below:

Assessment Method 1 (See outcomes above): Industry Review Panel Assessment

NOTE: N/S means the SLO was not scored in these evaluations.

| Student Learning Outcomes 2.1-2.14 | | 2018 | | 2017 | |
|------------------------------------|---------------------------------------|-------|-------|-------|------|
| | | AVG % | SD | AVG % | SD |
| 2.1 | Place-Based Design and Sustainability | 3.389 | 0.944 | N/S | N/S |
| 2.2 | Site Conditions | 3.667 | 0.368 | N/S | N/S |
| 2.3 | Due Diligence | 4.11 | 0.281 | 4.1 | 0.67 |
| 2.4 | Scope Costing | 3.472 | 0.630 | 3.5 | 0.80 |
| 2.5 | Sequencing and Scheduling | 3.722 | 0.334 | 3.7 | .078 |
| 2.6 | Trade Offs Design/Construction | N/S | N/S | N/S | N/S |

| | | | | | |
|------|---|-------|-------|-----|------|
| 2.7 | Risk Management | N/S | N/S | N/S | N/S |
| 2.8 | Change Management | N/S | N/S | N/S | N/S |
| 2.9 | Procurement and Delivery | N/S | N/S | N/S | N/S |
| 2.10 | Market Analysis | 3.278 | 0.885 | 4.2 | 0.51 |
| 2.11 | Financial Analysis and Deal Structuring | 3.378 | 1.125 | 3.7 | 0.78 |
| 2.12 | Design and Engineering Parameters | 3.444 | 0.703 | 4.2 | 0.67 |
| 2.13 | Proposal Preparation and Delivery | 4.028 | 0.491 | 4.0 | 0.62 |
| 2.14 | Project Presentation | 4.306 | 0.603 | 4.4 | 0.51 |

Assessment Method 2: Faculty Review

NOTE: N/S means the SLO was not scored in these evaluations.

| | | 2018 | | 2017 | |
|------|---|-------|-------|------|-----|
| | | AVG | SD | AVG | SD |
| 2.1 | Place-Based Design and Sustainability | 3.417 | 1.010 | N/S | N/S |
| 2.2 | Site Conditions | 3.417 | 0.577 | N/S | N/S |
| 2.3 | Due Diligence | 4.250 | 0.671 | N/S | N/S |
| 2.4 | Scope Costing | 3.000 | 0.433 | N/S | N/S |
| 2.5 | Sequencing and Scheduling | 3.500 | 0.827 | N/S | N/S |
| 2.6 | Trade Offs Design/Construction | N/S | N/S | N/S | N/S |
| 2.7 | Risk Management | N/S | N/S | N/S | N/S |
| 2.8 | Change Management | N/S | N/S | N/S | N/S |
| 2.9 | Procurement and Delivery | N/S | N/S | N/S | N/S |
| 2.10 | Market Analysis | 2.917 | 0.289 | N/S | N/S |
| 2.11 | Financial Analysis and Deal Structuring | 2.917 | 0.908 | N/S | N/S |
| 2.12 | Design and Engineering Parameters | 3.417 | 0.722 | N/S | N/S |
| 2.13 | Proposal Preparation and Delivery | 3.917 | 0.722 | N/S | N/S |
| 2.14 | Project Presentation | 4.000 | 0.433 | N/S | N/S |

NOTE: In 2017, Faculty used a different rubric which could not be translated.

9. Interpreting Results

Several trends have begun to emerge over the last few years of assessment. These trends have not been identified as isolated moments but have been unearthed through multiple assessment techniques over time. Rather than describing the isolated findings of each assessment event, what follows is an executive summary of the overall trending results. The items listed vary in scale and vary in the length of time it will take to alter.

The average for Assessment Method One, Industry (Review Panel) scores for the fourteen Sub-Learning Outcome for Learning Outcome 2 range from 4.3-3.27. These scores indicate that the Review Panel has agreed that the students have met these learning outcome objectives. The four lowest categories of Project Costing, Financial Analysis, Marketing Analysis, and Project Scheduling indicate that RDEV 7246 Building Design and Construction Principles, RDEV 7346 Site Planning and Infrastructure Development, RDEV 7356 Real Estate Financial Analysis, and RDEV 7536 Real Estate Securitization need additional focus by the faculty.

The average for Assessment Method Two, Faculty scores for the fourteen Sub-Learning Outcome for Learning Objective 2 range from 4.6-3.5. These scores indicate that the Faculty has agreed that the students have met these learning outcome objectives. The four lowest categories of Project Costing, Financial Analysis, Market Analysis, and Project Scheduling indicate that RDEV 7246 Building Design and Construction Principles, RDEV 7346 Site Planning and Infrastructure Development, RDEV 7356 Real Estate Financial Analysis, and RDEV 7536 Real Estate Securitization need additional focus by the faculty.

10. Communicating Results

The results are shared with graduate program faculty through direct conversations and group meetings. The results are discussed in four ways:

1. Individual faculty members that teach courses where assessments have been made will meet with the Director to discuss ideas for improvement in the courses.
2. Small groups of faculty related to four sequences within the curriculum will meet to discuss how the SLOs are introduced, mastered, reinforced, and/or assessed. These areas are: design and construction, finance and market analysis, field studies, and capstone.
3. At the August faculty meeting, the program assessment report will be discussed, and a quality improvement plan will be devised, utilizing the MRED Curriculum Committee to finalize the plan.

4. The Program Assessment report will be distributed to faculty on a special Canvas Course set up for faculty to review and comment in discussion threads.

11. Purposeful, Reflection and Action Plan

The assessment results are being shared with the MRED core faculty individually, with adjunct faculty, with the MRED Curriculum Committee, and at Faculty meetings.

The following action plan has developed for five identified courses of need in the program:

- 1) For RDEV 7346, more focus should be paid on core skills of site planning and urban design.
- 2) For RDEV 7356, Investment Analysis and RDEV 7536 Real Estate Securitization course faculty have been changed.
- 3) For RDEV 7356 and RDEV 7536, a greater focus will be placed on financial analysis, deal structuring, and capital markets.