VIRTUAL TECHNOLOGY AND DESIGN

1. Add the following courses:

   **VTD 151L Lab: Virtual World Building 1**
   1 credit
   This course is designed to support and further develop the comprehension of virtual reality design technology within the VTD 151: Virtual World Building 1 course.
   **Coreq:** VTD 151 or Permission

   **VTD 152L Lab: Virtual World Building 2**
   1 credit
   This course is designed to support and further develop the comprehension of virtual reality design technology within the VTD 152: Virtual World Building 2 course.
   **Coreq:** VTD 152 or Permission

   **VTD 153L Lab: Virtual World Building 3**
   1 credit
   This course is designed to support and further develop the comprehension of virtual reality design technology within the VTD 153: Virtual World Building 3 course.
   **Coreq:** VTD 153 or Permission

   **VTD 154L Lab: Virtual World Building 4**
   1 credit
   This course is designed to support and further develop the comprehension of virtual reality design technology within the VTD 154: Virtual World Building 4 course.
   **Coreq:** VTD 154 or Permission

   **Available via distance:** Yes
   **Geographical Area:** Moscow
   **Rationale:** The VTD program has developed a new design foundation sequence VTD151-154 (2cr ea.) and has requested to use these courses to establish a possible certificate program (12 credits). These new Lab courses will assist the corresponding design studio courses with online content/exercises that are designed to reinforce course curriculum and provide for a (12) credit experience for the certificate. These online labs can also be used for students who need additional support to expand their technical knowledge outside of the certificate.
Instructions: Please use one form for each request/action. Clearly mark all changes using either (1) Track Change or (2) strikethroughs for deletions and underlines for additions. Following the approval of the appropriate college curriculum committee, the department chair will e-mail the completed form to gracemiller@uidaho.edu.

Deadline: This form must be submitted by October 1 for inclusion in the next available General Catalog and to be available for scheduling beginning with the next summer session.

When applicable, a Curriculum Change Form and Course Approval Forms must accompany the short form.

**Note: If financial impact is greater than $250,000, you must complete a Program Proposal form.**

**Greater than $250,000 per FY:** X  **Less than $250,000 per FY:**

Describe the financial impact:

There will be minimal financial impact to the VTD program as it currently funds the delivery of the proposed courses that make up the certificate in Virtual Technologies. The VTD program has redeveloped the foundational technology curriculum (VTD 151-154) over the past two years to be delivered online to make a certificate option feasible. The VTD program will use existing resources and continued program development funds from the regular and summer academic revenue models to initiate this certificate. An increase of funds to the VTD program is expected through online course fees and by attracting nontraditional students from regional universities and community colleges that wish to enhance their current degree with a virtual technologies certificate from the University of Idaho. Future additional revenue may be developed by offering this certificate as dual credit.

- Realignment of instructional assignments of 0.5 FTE will be made to manage the foundational technology certificate in virtual technologies.
- To sustain any future growth there will be a need to acquire graduate teaching assistant support that can aid in the delivery and assessment of the certificate.

Rationale for Program Component Request or Name Change

The Virtual Technology and Design (VTD) program requests to create a new (12) credit online certificate in Virtual Technologies that utilizes foundational curricula from the Bachelors of Science in Virtual Technology and Design degree. The VTD curriculum has been fashioned to respond to the needs of contemporary design professionals with a focus on current Virtual Reality (VR) technology (virtual, mixed, augmented). With the rapid emergence and fluidity of VR within markets it is time to realign pedagogy so that it can keep pace with current/future industry demands.

This request seeks to capitalize on both the technical and intellectual assets of the University of Idaho and to focus on student needs for professional employment. The certificate will provide new opportunities to meet the strategic objectives of the University of Idaho while attracting nontraditional students by providing an alternative multi-dimensional approach to technology education. Through online delivery, this certificate is uniquely accessible to rural communities and serves both defined, and yet to be defined, disciplinary needs. The certificate teaches visual design coding skills and informs students of the nuances and subtleties of virtual technology science. It will prepare students to utilize electronic media as a primary means of communication from mobile applications to fully immersive VR environments. Students from the certificate program learn foundational VR technology skills while developing a professional portfolio that showcases their technical proficiencies for employment post-graduation.
Virtual Technologies Online Certificate Core Courses:
- VTD 151 (2 credit) + VTD 151L (1 credit) – Virtual World Building I: (3-credits with lab / 8-week session)
  Introduction to the processes and principles of design associated with virtual world building.
- VTD 152 (2 credit) + VTD 152L (1 credit) – Virtual World Building II: (3-credits with lab / 8-week session)
  Applied tools and techniques. Exploration of the processes and principles of design associated with virtual building.
- VTD 153 (2 credit) + VTD 153L (1 credit) – Virtual World Building III: (3-credits with lab / 8-week session)
  Intermediate level virtual world building with an emphasis on intermediate-level tools and techniques for creating more complex environments, modeling, lighting, materials, characters, interaction, and behaviors.
- VTD 154 (2 credit) + VTD 154L (1 credit) – Virtual World Building IV: (3-credits with lab / 8-week session)
  Synthesis of processes, principles, tools and techniques associated with virtual world building.

*The core courses are currently established within the VTD program and the content has been developed to be administered online.

**The current curriculum requirements for the courses identified will continue to be updated by the VTD program yearly upon final review of new technology, industry and student feedback.

Admission into the Virtual Technologies certificate program will conform with the University of Idaho’s admissions policy to have at least a 2.5 grade point average (on a 4.0 scale) from a secondary school. Students must also meet the criteria for admission to university level study in their home country. If participants already have achieved a post-secondary degree, they are fully eligible to enroll.

Name or Degree Change Only Requests
Leave blank if not making a name and/or degree change only request

This section to be completed ONLY for changes to the name of: degree, major, minor, option, emphasis, certificate, teaching endorsement.

<table>
<thead>
<tr>
<th>Current Name:</th>
<th>New Name:</th>
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<tr>
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<tr>
<td>Current Degree:</td>
<td>New Degree:</td>
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<tr>
<td>Other Details:</td>
<td>Effective Date:</td>
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Please indicate if any course or curriculum changes are occurring as a result of this name or degree change request: □ Yes □ No
If there are accompanying curriculum or course changes, complete the next section and attach the curriculum and/or course forms.

**Note: A substantive change to a program degree, major, or program component may require a program proposal form.

Please indicate whether 25% or more of the program learning outcomes are changing: □ Yes □ No

**Note: If you answered YES to this question, complete the table below:

<table>
<thead>
<tr>
<th>SLO#1</th>
<th>New Learning Outcome, if changed (If no change, write N/A and move to next outcome)</th>
<th>New Direct Measure (list student work product and explain how it will be evaluated)</th>
<th>Have you updated the assessment cycle to include this change? (yes/no)</th>
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Program Component Request
Leave blank if not adding, discontinuing, or modifying a program component. Program components consist of option, emphasis, minor, academic certificate less than 30 credits, or teaching endorsement.

Clearly mark all changes to existing program components by using either (1) Track Change or (2) strikethroughs for deletions and underlines for additions. A curriculum change form and/or course approval forms associated with this request are required to be submitted with this short form.

<table>
<thead>
<tr>
<th>X Create New</th>
<th>Discontinue</th>
<th>Implementation Date:</th>
<th>Fall 2019</th>
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<tbody>
<tr>
<td>Graduate Level</td>
<td>X Undergraduate Level</td>
<td>Law Level</td>
<td>Credit Requirement: 12</td>
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Are new courses being created: (circle your response) NO Yes
If yes, how many courses will be created:

If the request is for an option or emphasis, enter the associated major and degree:
Enter the name of the program component in the appropriate row:

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<tr>
<th>Option:</th>
<th>Emphasis:</th>
<th>Minor:</th>
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<td>Academic Certificate less than 30 credits:</td>
<td>Virtual Technologies</td>
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<td>Teaching Endorsement (Major/Minor):</td>
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Provide a summary/description of the program component using 50 words or less:

The certificate in Virtual Technologies teaches foundational VR development knowledge for entry level visualization, simulation and entertainment industries. The certificate is designed to provide defined, and yet to be defined, disciplines with professionals who are attracted to the possibilities that virtual technologies offer for building creative, experiential and sustainable economies.

Learning Outcomes and Assessment Information
This section must be completed if program component request section is completed

1. List the intended learning outcomes for the program component. Use learner centered statements that indicate what will students know, be able to do, and value or appreciate as a result of completing the program:

Certificate students will be trained in the use modem VR development software that is supported with lesson plans that expand design thinking abilities. Students in the program will know how to design and build virtual worlds using VR software that contextualizes interdisciplinary knowledge and problem domains. Students learn to appreciate the many complexities of life through a curriculum that develops new insight into the nature of reality through a series of VR world building exercises. Students of the program come away with the knowledge and appreciation of how virtual technologies can be used to help develop a more enlightened understanding of our world. Students will enhance their abilities to effectively communicate by using virtual technologies that connect themselves to exchange information with both physical and online communities.

VTD learning student learning outcomes:
- Ability to express design concepts using other media forms.
- Ability to integrate both the art and science of virtual design, with existing and developing virtual technologies.
- Attitude and ability to contribute as members of multi-disciplinary teams.
- Demonstrate critical thinking skills when drawing upon multiple disciplines to engage in a diversity of ideas and thoughtful inquiry to solve problems and imagine futures.
- Synthesize information through design processes and methodologies and apply knowledge to virtual environmental problems that lead to appropriate solutions.
- Understand and appreciate how electronically mediated environments are increasingly impacting access to economic opportunities, public services, entertainment, culture and education.
- Understand how the instruments of human interaction, production and consumption are being reconfigured by the evolution of virtual technologies.

2. Describe the assessment process that will be used to evaluate how well students are achieving the intended learning outcomes of the program component:

Each week online course exercises are uploaded for a general assessment on meeting the required proficiency standards of the course. During weeks four and eight the course, students synthesize and publish their work in an online professional portfolio for a formalized review by the VTD program where online feedback is given on overall technical proficiency, accuracy, design solution and creativity. VTD will evaluate certificate students within the current university student assessment strategy for the VTD program. This strategy assesses the learning outcomes by analyzing student portfolios for their ability to integrate both the art and science of virtual design with existing and developing virtual technologies.

Online portfolios showcase learned knowledge that is produced throughout the certificate. Graduates of the certificate program will also be assessed on how many are able to secure entry level employment utilizing the skills learned from the certificate.
3. **How will you ensure that the assessment findings will be used to improve the program?**

   We will synthesize student evaluations, faculty feedback and industry assessment to continually evaluate the quality, demand and impact of the certificate. Since the certificate utilizes the current VTD foundational design technology curriculum it will evolve as the program evolves. When new VR technologies and techniques emerge, the courses are updated by VTD to reflect the changes in the industry. The VTD program will work closely with supporting industries to ensure that the curriculum meets the general requirements for entry level employment.

4. **What direct and indirect measures will be used to assess student learning?**

   We utilize course project exercises (virtual reality worlds) and online professional portfolios as direct measures when assessing core proficiencies and learning. The culminated knowledge of the course work is highly visual and interactive making it possible to see and experience whether a student has learned the core concepts of the course. Indirect measures come in the form of peer evaluation by the program’s accrediting body, the National Association of Schools of Art and Design (NASAD), external industry assessments, and course evaluations.

5. **When will assessment activities occur and at what frequency?**

   Course assessments reports are generated by the VTD program at the end of each course (8 weeks). Yearly curricular assessments occur at the end of the regular University of Idaho academic year by the VTD faculty. NASAD accreditation standards review and assessments occur every 10 years.

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**Distance Education Availability**

This section must be completed if program component request section is completed

To comply with the requirements of the Idaho State Board of Education (SBOE) and the Northwest Commission on Colleges and Universities (NWCCU), the University of Idaho must declare whether 50% or more of the curricular requirements of a program may be completed via distance education. **If the program component is to be offered via distance education, additional or different formwork may be required.** Contact provost@uidaho.edu for assistance.

The U.S. Department of Education defines distance education as follows:

*Distance education means education that uses one or more of the technologies listed below to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor, either synchronously or asynchronously. The technologies may include:*--

1. The internet;
2. One-way and two-way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices;
3. Audio conferencing; or
4. Video cassettes, DVDs, and CD-ROMs, if the cassettes, DVDs, or CD-ROMs are used in a course in conjunction with any of the technologies listed in paragraphs (1) through (3).

<table>
<thead>
<tr>
<th>Can 50% or more of the curricular requirements of this program component be completed via distance education?</th>
<th>Yes*</th>
<th>X</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>*If Yes, can 100% of the curricular requirements of this program component be completed via distance education?</td>
<td>Yes</td>
<td>X</td>
<td>No</td>
</tr>
</tbody>
</table>

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**Geographical Area Availability**

This section must be completed if program component request section is completed

Identify the geographical area(s) this program component can be completed in:

- Moscow
- Coeur d’Alene
- Boise*
- Idaho Falls*
Other** | X | Location(s): | Online

*Note: Programs offered in locations other than Moscow may require additional formwork from the State Board of Education. Contact the Office of the Provost and Executive Vice President for additional information.

**Note: If Other is selected, identify the specific area(s) this program component will be offered.