Technology Entrepreneurship Certificate:
Buerk Center courses for enrolled non-business UW graduate students (18 credits minimum)

The schedule may change at any time, and the quarter in which a class is offered may change each year.

<table>
<thead>
<tr>
<th>Autumn Quarter 2015</th>
<th>Winter Quarter 2016</th>
<th>Spring Quarter 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRE 510—Entrepreneurial Strategy (4)</td>
<td>ENTRE 530—Entrepreneurial Decision Making (4)</td>
<td>ENTRE 509—Entrepreneurship (2)</td>
</tr>
<tr>
<td>ENTRE 555/MKTG 555—Entrepreneurial Marketing (4)</td>
<td>ENTRE 555/MKTG 555—Entrepreneurial Marketing (4)</td>
<td>ENTRE 557/FIN 557—Entrepreneurial Finance (4)</td>
</tr>
<tr>
<td>ENTRE 557/FIN 557—Entrepreneurial Finance (4)</td>
<td>ENTRE 557/FIN 557—Entrepreneurial Finance (4)</td>
<td>ENTRE 540—NOT A CLASS</td>
</tr>
<tr>
<td>ENTRE 542—Venture Capital Investment Practicum (2)</td>
<td>ENTRE 540—Business Plan Practicum (2)</td>
<td>Business Plan Competition: Investment Round (2) *** Students are eligible to receive 2 credits if their team advances to the Investment Round.</td>
</tr>
<tr>
<td>ENTRE 543—Environmental Innovation Practicum (2)</td>
<td>ENTRE 541—Technology Commercialization (4)</td>
<td>ENTRE 579—Business Models in Global Health and the Developing World (4)</td>
</tr>
<tr>
<td>ENTRE 579/BIOE 505—Biomedical Entrepreneurship (4)</td>
<td>ENTRE 600—New Ventures Practicum (2)</td>
<td>ENTRE 579—Impact Entrepreneurship (4)</td>
</tr>
<tr>
<td>ENTRE 579—Health Innovation Practicum (2)</td>
<td>ENTRE 600—Entrepreneurial Law Clinic (2)</td>
<td>ENTRE 600—New Ventures Practicum (2)</td>
</tr>
<tr>
<td>ENTRE 600—New Ventures Practicum (2)</td>
<td>ENTRE 600—Entrepreneurial Law Clinic (2)</td>
<td>ENTRE 600—Entrepreneurial Law Clinic (2)</td>
</tr>
<tr>
<td>ENTRE 600—Entrepreneurial Law Clinic (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**REQUIRED COURSES: ENTRE 509 (Entre Foundations - 2 credits) OR 530 (Entre Decision Making - 4 credits) plus 510, 555, 557 (4 credits each). 2-4 additional elective credits.**

Students who have completed core classes may apply for these cross disciplinary opportunities:
ENTRE 600—Entrepreneurial Law Clinic (2 credits each quarter; you can take 1, 2, or 3 quarters of the clinic, but must start in autumn)
ENTRE 600—New Ventures Practicum (2 credits; offered every quarter except summer)
These courses are by application only and the academic terms offered may vary.

**Required Core (14-16 credits combined)**

**ENTRE 509 Foundations of Entrepreneurship (2 credits) SPRING**
Five noted Seattle entrepreneurs will lead students through the steps, stages, trials and tribulations of starting a company—as only they can. Each and every one of them has been in the trenches, and survived. What’s more, these are people you’ll want to know as you head down the entrepreneurial path. The class will be a fast-paced overview of the entire company creation process and is designed to help you decide if entrepreneurship is the thing for you to pursue. Students will develop a model for a start-up and reflect on what they’ve learned weekly. (Instructors: Jacob Colker) OR ENTRE 530

**ENTRE 510 Entrepreneurial Strategy (4 credits) AUTUMN**
Start-ups are high-risk, high-return endeavors, and although there are notable examples of wealth creation, failure is the norm. This course uses competitive strategy to analyze the success and failure of entrepreneurial ventures and identifies the strategic principles that could increase the probability of success. (Instructor: David Tan)

**ENTRE 530 Entrepreneurial Decision Making (4 credits) WINTER**
Provides an overview of the major decisions entrepreneurs face when creating a business. Covers the startup lifecycle from idea generation, opportunity recognition, entry strategy, growth, and exit strategy. Various business models will be discussed to include high-tech, retail, franchising, and e-commerce, to name a few. (Instructor: Diane Legg) OR ENTRE 509

**ENTRE 555/MKTG 555 Entrepreneurial Marketing (4 credits) AUTUMN, WINTER**
Examines the skills and tools entrepreneurs need for bootstrap or guerilla marketing in their early-stage companies. Covers how to target market segments, position products, estimate demand, set prices, gain access to channels, and manage issues of rapid growth. (Instructor: Jonathan Zhang)

**ENTRE 557/FIN 557 Entrepreneurial Finance (4 credits) AUTUMN, WINTER, SPRING**
From the start of a new venture, entrepreneurs have financial decisions to make. They need to understand venture capital markets, stages of financing, business cash-flow models, measuring early-stage financial performance, and how to prepare financially for a successful placement. In this course, students will examine the elements of a term sheet, learn how to value early-stage companies, discuss compensation issues, make presentations to angel investors and venture capital groups, and learn to manage the finances of a new venture. (Instructor: Lance Young)
ENTRE 540 Business Plan Practicum/Resource Nights (2 credits) WINTER, (2 credits) SPRING [spring qtr. is not a class]
Winter: The Resource Nights give student entrepreneurs the opportunity to network with the founders/CEOs of companies, explore their entrepreneurial aptitude, and work through the details of their own start-ups. Provides structure, tools, and resources to start of company, and to compete in the UW Business Plan Competition (BPC). Students do not have to take the Resource Nights for credit in order to compete in the BPC. Credit/no credit only.  (Instructor: Tom Eckmann)  Spring: This is not a class. Students are eligible to receive 2 credits if their team advances to the BPC Investment Round.

ENTRE 541 Technology Commercialization (4 credits) WINTER
Thousands of patents for innovative technologies are granted each year, yet only a fraction of them reach the market as products. Turning a technology into a compelling product—and bringing that product successfully to market—is the opportunity of technology commercialization. Through lectures, case studies, and guest speakers, this course provides students with hands-on experience building and presenting a commercialization plan for an innovative new technology.  (Instructor: Ken Myer)

ENTRE 542 Venture Capital Investment Practicum (2 credits) AUTUMN
This course provides an overview of the venture capital world. Though the capstone of the class is the Venture Capital Investment Competition (VCIC), the curriculum is more broadly designed to provide students with the necessary tools to evaluate early-stage investment opportunities. The class is interactive and integrative, featuring speakers who are entrepreneurs, VCs, early-stage attorneys and prior VCIC competitors. The VCIC is a national strategy competition for venture-minded, entrepreneurial grad students. Student teams assume the role of a venture capital firm and are given a hypothetical fund to invest and have 48 hours to evaluate bona fide business plans before making investment decisions. Teams then defend their allocation decisions before a judging panel of VCs from firms. Credit/no credit.  (Instructor: Dr. Buddy Ratner)

ENTRE 543 Environmental Innovation Practicum (2 credits) AUTUMN
Unique interdisciplinary course focuses on what it takes to develop innovative clean-tech solutions to our most pressing environmental challenges and creating exciting new business opportunities along the way. Weekly speakers include top national, international and local experts in natural sciences, engineering, social sciences, business, entrepreneurial finance, policy and law. Topics include alternative energy and energy efficiencies, green building, and transportation.  (Instructor: Diane Legg)

ENTRE 579/BIOE 505 Biomedical Entrepreneurship (4 credits) AUTUMN
This course introduces to students the concepts and methodologies important for the commercialization of medical technologies such as implants, diagnostics and therapeutics. Medical technologies, in contrast to other engineering technologies, have unique funding, regulatory and market requirements and these specialized ideas are the foundation of the course. Specific science and engineering knowledge are not required for this course—science and technology ideas will be introduced as appropriate. We also seek to build potential commercialization teams in the medical device space. Through a combination of lectures and guest lectures from local and national experts, we cover aspects of the following topics specific to medical technology: market analysis, regulations, funding strategies, reimbursement strategies, FDA standards, patents, business-plan development, and productization.  (Instructor: Deb Hagen-Lukens)

ENTRE 579 Impact Entrepreneurship (4 credits) SPRING
Creating sustainable social change through mission-driven businesses. Mission-driven businesses harness the power of the marketplace to solve social, environmental, or economic problems and/or create social value. They are proliferating rapidly, playing a catalytic role in fostering multi-stakeholder collaboration and investment. “Impact Entrepreneurship” is for MBAs who recognize that every company, every organization has a responsibility to people, planet, and profit. Is your passion directed toward learning more about systems-change enterprises in the U.S. and abroad, creating your own mission-driven business, or working in a large corporation, where you can invest in social impact through corporate sustainability initiatives, supply chain, operations, or human resources? Are you interested in impact investing and how to successfully evaluate opportunities for financial gain AND social change? Then take this course!  (Instructor: Lisa Nitze)

ENTRE 579 Business Models in Global Health and the Developing World (4 credits) SPRING
The class will begin by framing the agenda from the 2010 report on the Global Burden of Disease. We will then explore many of the models used to tackle the issues in global health, using public-private partnership, corporate, and entrepreneurial cases. The class will examine and debate the efficacy of efforts in combatting the big three: AIDS, malaria and TB, as well as look at the economics of eradication efforts in guinea worm and policy, study the funding architecture for global health, and look at issues around neglected diseases and pricing models for the developing world.  (Instructor: Emer Dooley)

ENTRE 579 Health Innovation Practicum (2 credits) AUTUMN  (Instructors: Dr. Sam Broid and Emer Dooley)
This class teaches the mechanics of taking a promising healthcare solution from inception to commercialization. Topics will revolve around the big problem areas, biosign processes, and the health innovation pipeline, including issues related to intellectual property, company formation, healthcare markets and reimbursement, and the medical regulatory process. This is a precursor to the Buerk Center's new Health Innovation Challenge scheduled for March 2016.

ENTRE 600 New Ventures Practicum (2 credits each quarter) AUTUMN, WINTER, & SPRING  by application
Students work on technology commercialization projects from CoMotion with assistance and comprehensive mentoring from technology managers, Northwest entrepreneurs, UW researchers, and venture investors. For the duration of a quarter, students perform a variety of tasks that range from producing a plan for future industry application, market analysis, or licensing opportunities. Credit/no credit.

ENTRE 600 Entrepreneurial Law Clinic (2 credits) AUTUMN  by application
The Law School and the Buerk Center produce an Entrepreneurial Law Clinic, providing early-stage entrepreneurs with both legal and business consulting services. The student teams include law students (with specialties in intellectual property, tax, and corporate securities) and second-year entrepreneurship MBAs to conduct legal audits and business due diligence. Credit/no credit.  (Director: Jennifer Fan)

MKTG 510 New Product Development (4 credits) SPRING
This course integrates business, design, and engineering functions in the presentation and application of structures, tools, and methodologies important for successful new product development. Projects have a cross-functional team emphasis.  (Instructor: Tom Giordano)

Visit startup.washington.edu or contact Samantha Ogle at samogle@uw.edu or 206-616-8687 for more information.  (9/1)