

**APPROVED COURSES FOR CERTIFICATE IN ENTREPRENEURSHIP AND INNOVATION - Page 1 of 3**

<b>PROGRAM REQUIREMENTS:</b> Students must take the equivalent of five courses in the following categories:					
<b>Two Required Core Courses (6 credits)</b>					
ENTR 20000 Introduction to Entrepreneurship and Innovation					
ENTR 31000 (formerly ENTR 20100) Marketing and Management for New Ventures (pre-req. ENTR 20000)					
<b>Two Option Courses</b>					
Option courses provide students with discipline or industry/market-specific depth in areas that are relevant to entrepreneurship and/or innovation.					
<b>One Capstone Course or Transcribed Experience</b>					
Capstone courses provide students with hands-on, real-world entrepreneurial or innovation-related experiences that apply knowledge from previous ENTR and option courses.					
Students will be permitted to substitute an additional capstone for one of the required option courses.					
Courses designated "OPEN" on the approved list are available to all certificate program students, where space permits and pre-requisites have been met.					
<b>The Process</b>					
To enter the Program students should enroll in ENTR 20000. Those interested in receiving the Certificate will fill out a Completion Plan when enrolled in ENTR 31000.					
Grade of C- or higher must be obtained in all ENTR courses used toward Certificate Completion.					
<b>REQUIRED ENTREPRENEURSHIP CORE COURSES</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
ENTR 20000	Introduction to Entrepreneurship and Innovation	Core	OPEN		F/Sp, or SS
ENTR 31000	Marketing and Management for New Ventures	Core	OPEN	ENTR 20000	F/Sp, or SS
ENTR 31500	Business Planning for Social Entrepreneurship	Core	OPEN	ENTR 20000; Fulfills second core requirement (ENTR 31000)	Both
<b>ENTREPRENEURSHIP OPTION COURSES</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
ENTR 46000	Internship and Career Preparation Seminar	Option	OPEN	Online course. For more information, contact Rita Baker at bakerr@purdue.edu	F/Sp or SS
ENTR 47000A	Women and Leadership	Option	OPEN		Spring
ENTR 39000/MGMT 39000 Specific Title Only	New Business Ventures and the Law	Option	OPEN		Fall
<b>ENTREPRENEURSHIP CAPSTONE COURSES &amp; EXPERIENTIAL PROGRAMS</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
ENTR 48000	Entrepreneurship Capstone	Capstone	OPEN	ENTR 20000, 31000 and at least 1 option course or equivalent	Both
ENTR 48100	Entrepreneurship Capstone - Consulting for Emerging Enterprises	Capstone	OPEN	ENTR 20000, 31000 & at least 1 option or equiv, instructor permission	Both
ENTR 48200	Venture Planning Capstone	Capstone	OPEN	ENTR 20000, 31000 and at least 1 option course or equivalent	Both
ENTR 39699	Interns for Indiana Experience	Capstone	OPEN	Formerly ENTR 46100. For more information, contact Aimee Griggs at aimgriggs@purdue.edu	F/Sp or SS
<b>ADDITIONAL APPROVED EXPERIENTIAL PROGRAMS (STUDY ABROAD &amp; INTERNSHIPS)</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
	Tec de Monterrey, campus Queretaro, Mexico	Option	SA approval	Select course reqs. Contact Glenda at gcaudill@purdue.edu	F/Sp or SS
	DIS Copenhagen, Copenhagen, Denmark	Capstone	SA approval	Select course reqs. Contact Glenda at gcaudill@purdue.edu	F/Sp or SS
	GEM Trailblazer Summer NTU Singapore, Tracks 2 and 4	Both possible	SA approval	Select course reqs. Contact April Roblillos at robillos@purdue.edu	SS
	Universita Bocconi, IES-Milan	Option	SA approval	Select course reqs. Contact Glenda at gcaudill@purdue.edu	Both
	University College Dublin's Quinn, Sch. of Business, Dublin, Ireland	Option	SA approval	Select course reqs. Contact Glenda at gcaudill@purdue.edu	F/Sp or SS
	Tilburg University Summer School Entrepreneurship Prgm	Capstone	SA approval	Select course reqs. Contact Glenda at gcaudill@purdue.edu	SS
	Discovery Park Undergraduate Research Internship	Option	OPEN	For more information, contact Dr. Dorothy Teegarden at teegarden@purdue.edu	F/Sp or SS
	Cancer Prevention Internship Program	Option	OPEN	For more information, contact Dr. Dorothy Teegarden at teegarden@purdue.edu	F/Sp or SS
<b>AGRICULTURE</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
AGEC 33000	Management Methods for Agricultural Business	Option	OPEN		Both
AGEC 33100	Principals of Selling in Agricultural Business	Option	OPEN	Second semester Freshman or higher	Both
AGEC 42400	Financial Management of Agricultural Business	Option	OPEN	AGEC 311 or MGMT2000 or BUS A20100	Fall
AGEC 42600	Marketing Management of Agricultural Business	Option	OPEN	MGMT 20000 or AGECE 33100 & AGECE 33000 or ENTR 20000	No Longer Offered
AGEC 32700 + 42700	Advanced Agribusiness Marketing	Option	OPEN	MGMT 32300 or MGMT 32400, replaces AGECE 42600	Both, Fall
AGEC 42900	Agribusiness Marketing Strategies	Capstone	OPEN	AGECE 42600 & 42700 or Instructor permission	Spring
AGEC 43000/53000	Agricultural and Food Business Strategy	Capstone	OPEN	AGECE 42400 and 42600	Spring
AGR 49000	SERVE Community-Project Strategies Laboratory	Capstone	OPEN	See Department	Both
ANSC 44000	Horse Management	Option	AG	ANSC 22100	Fall
ANSC 49400	Animals and Food Security Service Learning	Capstone	ANSC	See Department	SS
ASM 49400/ABE 49500	Project Planning & Management/Capstone Project	Capstone	ASM/ABE	ASM 22100 and Senior status or Instructor Permission	Both
FS 44300	Food Processing III	Capstone	FS	FS 42000	Spring
HORT 43500	Principals of Marketing & Management for Horticultural Businesses	Option	OPEN	AGECE 33000 or ENTR 20000 & AGECE 20300 or AGECE 21700	Fall
HORT 44500	Strategic Analysis of Horticulture Production and Marketing	Capstone	LAHD/HOSC	HORT 43500	Spring
HORT 42500	Landscape Horticulture Capstone Project	Capstone	LAHD/HOSC	HORT 31600; graduate candidate status	Both
YDAE 49100	Engaqement Methods for Int' Food Security-in Haiti	Capstone	Open	See Department	Both
<b>EDUCATION</b>					
		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
EDPS 30000	Student Leadership Development	Option	OPEN	Instructor permission	Both

**APPROVED COURSES FOR CERTIFICATE IN ENTREPRENEURSHIP AND INNOVATION - Page 2 of 3**

<b>ENGINEERING</b>		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
ABE 48400+48600/ASM 49400+49500, 48500	Project Planning & Management+Ag Engr Design	Capstone	ABE/ASM	ASM 22100 and Senior status or Instructor Permission	F,S
ABE 55700	Tranp Op Food and Bio Sys II	Option	ABE/CHE	ABE 457, Formerly ABE 555	Fall
ABE 55800	Biological & Food Process Design	Capstone	ABE/CHE	ABE 55700	Spring
ABE 59100	Special Topics on Bionanotechnology	Option	See Dept.	Senior standing	Variable
ABE 59100	Biological foundations for bioMEMS and bionanotechnology	Option	See Dept.	MA 15900 and 1 yr. gen. chem.	Spring
AAE 25100	Introduction To Aerospace Design	Option	OPEN	ENGR 12600 or ENGR 12100	Both
AAE 35103	Aerospace Systems Design	Option	AAE	AAE 25100	Fall
AAE 45000	Spacecraft Design	Capstone	AAE	Senior standing	Both
AAE 45100	Aircraft Design	Capstone	AAE	Senior standing	Both
AAE 45400	Design Of Aerospace Structures	Option	AAE	AAE 35200	Fall
AAE 53500	Propulsion Design, Build, Test	Option	AAE	AAE 35200 or permission	Spring
BME 48800, 48900, 49000	BME Senior Design Project	Capstone	BME	Consists of 3 courses, 488 (1), 489( 2), 490 (1)	F, Both , F
CE 35500/EEE 35500	Engineering Environmental Sustainability	Option	OPEN	Sophomore standing or higher	Spring
CE 52100	Construction Business Management	Option	OPEN	Junior standing or higher, MGMT 20000, STAT 51100 or 35000, GR-CE 52100	Fall
CE 52400	Legal Aspects of Engineering Practice	Option	OPEN	Senior standing	Both
CE 59700 Specific Title Only	Entrepreneurship and Business Strategy in Engineering	Option	OPEN	Junior standing or higher	Variable
CHE 45000	Design of Chemical Process Systems	Capstone	CHE	Pre: CHE 30600, 34800, 37800, Co-req: CHE 43500	Spring
ECE 27900/37900/47900	Soph/Jr/Sr Participation in Vertically Integrated Projects in ECE	Option	ECE	Department permission	Both
ECE 49022	Senior Design Special Projects	Capstone	ECE	Senior standing or consent. Formerly ECE 40200	Both
ECE 47700	Digital Systems Senior Project	Capstone	ECE	Instructor permission	Both
ENGR 29600 Specific Title Only	Fundamentals of Innovation Theory and Practice	Option	OPEN		Both
EEE 35500/CE 35500	Engineering Environmental Sustainability	Option	OPEN	Sophomore standing or higher	Spring
EEE 48000	Environmental And Ecological Engineering Senior Design	Capstone	EEE	Senior standing	Both
EPCS courses	EPICS Participation	Option	OPEN	Total of 3 credits over 2 semesters.	Both
EPCS at the 40000 level	Senior Participation in EPICS	Capstone	OPEN	Total of 3 credit hours of 400 level over 2 semesters	Both
IE 34300	Engineering Economics	Option	OPEN	Pre: ENGR 12600, Co-req. CGT 16300	F/Sp or SS
IE 54500	Engineering Economics Analysis	Option	OPEN	IE 33500, Junior/Senior status	Fall
IE 54600	Economic Decisions in Engineering	Option	OPEN	A course in probability, Junior/Senior status	Spring
IE 56600	Production Management Control	Option	OPEN	Junior standing or higher, Co-req IE 38300	Both
IE 59000	Financial Engineering	Option	IE	Junior standing and permission	Both
IDE 48500	Multi-disciplinary Design	Capstone	MDE	Pre: IE 343 or equiv, ENE approved design course, MA 262 or MA 265 & 266, dept permission. Pre-or Co-req IDE 301	Spring
ME 26300	Introduction to Mechanical Engineering Design	Option	ME	Pre:CGT 16300, ME 20000, 27000, Co-req: ME 29000, MA 2620	Both
ME 44400	Computer-aided Design and Prototyping	Option	ME	Senior standing	Both
ME 46300	Engineering Design	Capstone	ME/SCI	ME 31500, 35200, 37500, MSE 23000	F/Sp or SS
ME 49700 Specific Section and Title Only	Product Dvlpmnt-Design Process	Option	ME	Contact ME Advising	SS/ Variable
ME 55300	Product and Process Design	Option	ME	Senior standing	Spring
ME 55400	Intellectual Property for Engineers	Option	OPEN	Junior standing & Phys 17200	Fall
MSE 59700	Materials and Devices for Solid-State Energy Conversion	Option	E	See Department	Variable
NUCL 47000	Fuel Cell Engineering	Option	Sci/E/Tech	Junior standing or higher	Fall
<b>HEALTH AND HUMAN SCIENCES</b>		<b>Type</b>	<b>Major</b>	<b>Pre-reqs &amp; Notes</b>	<b>Semester</b>
CSR 30900	Leadership	Option	CSR	Junior standing or higher	Spring
CSR 34400	Fundamentals of Negotiation	Option	CSR or consent	AGEC 33100 and (CSR 315, 209, or 342 or consent of instructor)	F/Sp or SS
CSR 40600	E-Retailing	Option	CSR	First semester Retail Management Senior or higher	Fall
HK 38500	Methods of Health Promotion and Education	Option	Some HK/NUTR	HK 26600 or HK 36500	Both
HK 42400	Health and Fitness Program Management	Option	Some HK/NUTR	HK 26600	Both
HTM 31200	Human Resources Mgmt. for the Service Industries	Option	HTM	Second semester Freshman or higher	F/Sp or SS
HTM 44100	Financial Management for the Hospitality Industry	Option	HTM	Pre-req: HTM 14100, 24100; Co-req: HTM 34100	Fall
HTM 49900	Feasibility Studies & Business Development in HTM	Option	HTM	Upper Division	Both
NUR 41701	Leadership in Nursing	Option	NUR	NUR 31401, 31501, 31601, 31701 & 31901	Both

**APPROVED COURSES FOR CERTIFICATE IN ENTREPRENEURSHIP AND INNOVATION - Page 3 of 3**

LIBERAL ARTS		Type	Major	Pre-reqs & Notes	Semester
COM 21700	Science Writing and Presentations	Option	OPEN		F/Sp or SS
COM 31400	Advanced Presentational Speaking	Option	OPEN	Second semester Sophomore, COM 11400 or COM R1100	F/Sp or SS
CHNS 22400	Chinese Level IV: Business Chinese	Option	Open	CHNS 20100	Spring
ENGL 42000*E0_ Sections Only	Business Writing *(for Entrepreneurship Certificate Students)*	Option	OPEN	Special Sections For ENTR Students only , ENGL 106 or 108	Both
FR 22400	Business French	Option	OPEN	FR 20100	Variable
FVS 26100	Technical Video Production I	Option	Intrdisc Film/Vid		Both
FVS 44200	Digital Film Production	Option	Intrdisc Film/Vid	FVS 26100	Both
GER 42400	Business German	Option	OPEN	GER 30200	Fall
GER 52400	German for International Trade	Option	OPEN	GER 42400 or Instructor permission	Spring
SPAN 42400	Business Spanish	Option	OPEN	SPAN 30200	Both
MANAGEMENT		Type	Major	Pre-reqs & Notes	Semester
MGMT 17500	Information Strategies for Management Students	Option	MGMT	Contact Instructor for permission if Non-Mgmt	Both
MGMT 19000	Intro to MGMT & Info Strat	Option	MGMT	Specific MGMT population	
MGMT 30400	Introduction to Financial Management	Option	Non-MGMT	Previously listed as MGMT 39000	F/Sp or SS
MGMT 39000/ENTR 39000 Specific Title Only	New Business Ventures and the Law	Option	OPEN		Variable
MGMT 42300	New Product Development	Option	MGMT	MGMT 32400	Spring
MGMT 42910	Experiential Marketing	Option	MGMT	Consult Instructor, formerly known as Entrepreneurial Marketing	Both
MGMT 48400	Management of New Enterprises	Capstone	OPEN		Fall
MGMT 48800	Electronic Commerce and Information Strategies	Option	MGMT	Junior level or higher	Variable
MGMT 49000 Specific Title Only	Technology Strategy	Option	MGMT	First semester Senior or higher	Variable
MGMT 49000 Specific Title Only	Social Entrepreneurship in Practice	Capstone	MGMT	ENTR 20000 and 31000/ Consult Instructor	No Longer Offered
MGMT 59000 Specific Title Only	Student Managed Venture Fund	Option	OPEN	Individual Study, Consent of Instructor	Fall
PHARMACY		Type	Major	Pre-reqs & Notes	Semester
PHRM 49000 Specific Section and Title Only	Business Plan Competition	Capstone	PHARM	P-1 or greater	Variable
PHRM 83100	Health Care Systems	Option	PHARM	P-1 Standing	Spring
PHRM 84900	Population Health Management	Option	PHARM	P-2 Standing	Spring
PHRM 87000	Health Policy Applications	Option	PHARM	P-3 Standing	Fall
PHRM 86900	Practice Management & Marketing	Capstone	PHARM	P-3 Standing	Spring
POLYTECHNIC		Type	Major	Pre-reqs & Notes	Semester
AT 49800	Aviation Technology Capstone	Option	AT	Senior standing	Both
AT 412	Aviation Finance	Option	AT	MGMT 20100	Fall
BCM 45500	Construction Company Management	Option	BCM Major/Minor	Senior standing	Both
BCM 48701	Construction Capstone	Capstone	BCM	Senior standing, BCM 34500 & BCM 45500	Both
CGT 41100 + CGT 45000	Contemporary Prob. in Applied Comp. Grphcs + Professional Pract.	Option	CGT	Junior standing or higher	Both
CNIT 48000	Managing IT Projects	Option	C&IT	Second semester Junior	Both
ECET 43000+ 46000, ECET 43100+46100	Product/ Program Mgmt. + Multi-disciplinary Capstone Project	Capstone	ECET or consent	ECET 27000, ECET 38001+ 6 hrs ECET elective or consent of dept.	Yr Long Seq
IET 45100	Monetary Analysis For Industrial Decisions	Option	OPEN		Spring
IT 19000	Innovation Through Human Centered Design	Option	OPEN	*IET 45100/IT 45000 is now TLI 33400	No Longer Offered
IT 22600	Biotechnology Lab I	Option	OPEN		Both
IT 33000	Industrial Sales and Sales Management	Option	OPEN	*IT 23000 is now TLI 21400	Spring
IT 43400	Global Transportation and Logistics Management	Option	OPEN	*IT 23000 is now TLI 21400	Variable
MET 40100+ MET 40200	Multi-disciplinary Capstone Projects + Mechanical Design	Capstone	MET or consent	MET 34600(concurrent ok), MET 10200, MET 23000, and MET 28400	Yr Long Seq
MFET 48000 +MET 48100	Project Planning for Integration+ Integration and Manufacturing	Capstone	MFET or consent	MFET 37400	Yr Long Seq
OLS 37500	Training Methods	Option	OLS/AT	OLS 25200 & OLS 27400	Both
OLS 37600	Human Resources Issues	Option	OLS	OLS 38600 with a grade of C or higher	Both
OLS 45000	Project Mgmt for Organizational & Human Resource Development	Option	OLS		No Longer Offered
TLI 21400	Industrial Supply Chain Management	Option	OPEN	Formerly IT 23000	Both
TLI 31400	Leading Innovation in Organizations	Option	TLI		Both
TLI 31500	Innovative Product Dev and Testing	Option	TLI		Fall
TLI 33400	Economic Analysis For Technology Systems	Option	OPEN	Ma 15800 or higher: Formerly IET 45100/IT 45000	Both
SCIENCE		Type	Major	Pre-reqs & Notes	Semester
COM 21700	Science Writing and Presentations	Option	OPEN		F/Sp or SS
CS 40700	Software Engineering Senior Project	Option	CS	Senior Status	Both
"Great Issues"	All Great Issues in Science Courses-view link for specific offerings	Option	OPEN	<a href="http://www.science.purdue.edu/Current_Students/curriculum_and_degree_requirements/great-issues.html">www.science.purdue.edu/Current_Students/curriculum_and_degree_requirements/great-issues.html</a>	Variable
SCI 49000 Specific Title Only	Dean's Executive Forum	Option	Jrs & Srs CoS	Junior standing or higher CoS	Fall

Revised Sept. 2017

**See [www.purdue.edu/entr](http://www.purdue.edu/entr) for updated list**