

Name of Module: Business Development labs	Credit Points (ECTS): 3 in Semester 1 + 5 in Semester 2	Module-ID: BDL intro (code EMEIE102 for 3 ECTS) in semester 1 (included in the Innov. & Entrepreneurship 1), and a course (without a specific code, but accounted for 5 coefficients) in semester 2 (included in the Innov. & Entrepreneurship 3)
Person Responsible for Module (Name, Mail address): I&E UCA coordinator, Cédric Ulmer		
Université Côte d'Azur	Department: Polytech Nice Sophia	

1. Prerequisites for Participation

According to general prerequisites for EIT Digital Master School programs; attendance to the EIT Digital I&E Basics module.

2.a. Applicable EIT Overarching Learning Outcomes

- Ability to think beyond boundaries and systematically explore and generate new ideas ([C]reativity)
- Ability to use knowledge, ideas or technologies to create new or significantly improved products, services, processes, policies, new business models or jobs ([I]nnovation)
- Ability to transform innovations into feasible business solutions ([E]ntrepreneurship)
- Leadership and decision-making, based on a holistic understanding of the contribution of higher education, research and business to value-creation, in limited sized teams and contexts ([L]eadership)
- Ability to identify short and long term future consequences of plans and decisions from an integrated scientific, ethical and intergenerational perspective and to merge this into a solution-focused approach, moving towards a sustainable society (Making [V]alue Judgements)

2.b. Intended Learning Outcomes

- [C] The ability to explore and create ideas or modify existing ideas for business solutions
- [I] The ability to apply the learned knowledge for development of a new product or business concept
- [I] The ability to recognize and address diverse obstacles in transforming a technology into a business
- [E] Understanding of the different phases of a business development process
- [L] The ability to use decision-making and leadership competencies while transforming new ideas into business solutions
- [L] The ability to reflect upon team processes
- [L] The ability to work in multi-disciplinary teams
- [V] The ability to realize ethical and sustainability considerations when developing new products/technologies
- The ability to transforming new ideas into business solutions on the commercial market, combined with decision-making and leadership competencies

3. Content

Business plan development in phases – (a) idea recognition – (b) concept design – (c) Business Plan conceptualization – (d) Business Plan presentation.

Application of subjects from Basics or introduced in Bus Dev Lab:

- **Business Model Canvas (9 boxes)**
- **Methods and tools for customer discovery, customer validation, evidence-based decision making, market analysis**
- **Business ethics, sustainability**
- **Entrepreneurial finance concepts, methods and tools (cash flow management, financial scenarios)**
- **Other business planning concepts methods and tools (strategy, marketing, market entry)**
- **Financing, fund raising**
- **IP and intellectual assets Management**
- **Pitching and oral communication**

These contents are normally introduced and applied through the Bus Dev Lab project (learning by doing)

4. Teaching and Learning Methods

The Business Development Lab module lets students work in teams on several business plan development project. The teams are multidisciplinary in nature also containing students from other disciplines (according to availability), one BDL work per semester.

In each semester, the BDL is split in two phases: a short one, focused on applied lectures, and a longer one, focused on learning by doing through a project.

Students start by choosing an entrepreneurial idea/challenge/problem either brought in from the students themselves or inspired/indicated by business partners or academics. Ability to do actual customer/hypothesis is considered. The subject relates to ICT and involves technology to some extent. Associated to the BDLs per se, the students are being offered Sakai on-line specific EIT Digital courses and a design thinking full day seminar.

Course 1: mini-BDL (2 ECTS, First semester)

The Business Development labs module start with this 1st course scheduled as a 6 weeks period, early in the semester. Within this period, the goal is to **rapidly present the business development** process, **taking a tiny but innovative business case** as an example. Students form small teams preferably merging different cultural, scientific background. The course is organized as 6 x 3 hours sessions. In each session, one specific theme is addressed, and the teams also work in a lab mode to develop their business idea that they will present at the end of the course.

Starting the BDL module with such a *compact and rapid tour overview* will show the following benefits:

It serves as an **overall motivation** for the other I&E courses (be they from Basics in I&E or from this BDL same module). Indeed, it provides some structuration and respective articulation of the various concepts in business, concepts that are more deeply handled in other I&E courses. Besides, as it happens at the very beginning of the university year, it allows the students to rapidly get to know each other. Course plan is:

- Session 1 : Introduction to innovation – Basics
- Session 2 : How to launch innovation : writing the Business Plan (I)
- Session 3 : Business Plan - BP (II)
- Session 4 : Entrepreneurship supports and funding
- Session 5 : Business Plan (III) –Ready to Pitch ?
- Session 6 : BP presentation (written & oral)

Evaluation for this course is based on both the written and the oral presentation for a total of 80%. Out of these 80%,20% of the mark is individual and consists in ranking students according to their personal participation during the course.

As a complement, students are being offered a one day organized at SAP Labs premises on **Design Thinking**

Additional on-line courses (1 ECTS, First Semester)

The mini BDL semester 1 course is complemented for 1 ECTS, with on-line courses from the EIT Digital Moodle platform

- Design thinking (50%)
- IP Strategies plus IPR and Patent management (25%)
- Leadership (25%)

Course 2: BDL core (4 ECTS starts in 2nd semester)

In this course, students are introduced to some business development experiences. EIT Digital thematic action lines partners propose some business cases to work on. Project ideas can also be proposed by some local partners or by students themselves. Business cases will be selected preferably from the Data Science field.

Small teams of students are set up, through a team building process mixing personal competencies, and a debriefing about proposed business ideas to develop.

Intermediate evaluation for this course is based upon an initial business development specification, provided by each team, and regular pitch trainings. At the end, the evaluation is split as follows:

- 25%: Final pitch and business project oral presentations, by group (2/3) and, for (1/3) evaluation of the personal leadership
- 75% on the final delivered written group report containing the business model, and including a section describing some technical choices that would be requested in case a prototype of the proposed innovative product would be needed. Included (for 10% out of the 75%) is a section to describe the “Value proposition” and any usage of living labs facilities

To execute the BDL in concrete terms, teams are requested to work on two aspects:

1) Project Management, strategy definition and access to finance. 2) Besides, students are guided in order to conduct a feasibility analysis and initiate plans for the development an alpha-stage prototype of their product.

We believe this close to real prototyping step is important for students to get a realistic idea about the needed efforts for developing and launching the target product (including associated IPR related actions, living labs experiments/valuations) and consequently for building a realistic **business plan**. Indeed, the overall goal of the BDL course is to end up with a detailed business plan. BMC is used. To this aim, one element of the canvas is addressed each week during traditional classes, complementing relevant learning outcomes got from the Basics in I&E first semester' courses.

The BDL is assessed by the final pitch in front of a jury, composed of academics and industrials. Alternatively, and whenever feasible, participation in a business challenge will be encouraged.

Additional on-line course (1 ECTS, Second Semester)

Some specifically targeted sessions are organized to more deeply address:

- Business Ethics and sustainability
- Technologies Commercialization strategies
- Managing Change in Organizations
- Advanced business models

5.a. Assessment and Grading Procedures

For the 1st semester course “mini BDL”, evaluation is based on both the written and the oral presentation for a total of 80%. 20% of the mark is individual and consists in ranking students according to their personal participation during the course. For the Moodle on line courses, peer review and self-evaluation is used.

For the 2nd semester course “Core BDL”, see above the respective percentages. Overall bear in mind that assessment is based on Evaluation of final oral presentation + evaluation of final report deliverables: Deliverables include: slideware (progress and/or project pitch) + written report (BM, BP). Evaluation includes a share (minimum 25%) of individual evaluation. For the Moodle on line courses, peer review and self-evaluation is used.

Note that the **Innovation and Entrepreneurship 1** of 9 ECTS of semester 1 includes three courses, each with coefficient 3, and the average total mark permits to collect the 9 ECTS as soon as it is ≥ 10 over 20. One of the three courses pertain to the BDL for a coefficient of 3. The two other courses, each having a coefficient of 3, pertain to the category Basics in I&E EIT Digital module (basis and entrepreneurship, each for a coefficient of 3).

Semester 1 - Innovation and Entrepreneurship 1 code EMUIE10	9 ECTS
Digital Business (coeff 3) code KMUDBU	Zakaria Babudtsidze (SKEMA)
Basics in Innovation and Entrepreneurship (coeff 3) code EMEIE101	Cédric Ulmer
Business Development Lab Introduction (coeff 3) code EMEIE102	Cédric Ulmer/Luc Ferrier

Note that the **Innovation and Entrepreneurship 3** of 9 ECTS of semester 2 includes the mandatory summer school mark for a coefficient of 4, and the rest pertains to the BDL for a coefficient of 5.

Semester 2 - Innovation and Entrepreneurship 3 code EMUIN20	9 ECTS
Code EMEIN20: Business Development Lab (coeff 5) and EIT summer school (coeff 4)	Cédric Ulmer

Overall, spanning the two semesters, the BDL overall material and work is accounted for 8 ECTS.

Note that the **Innovation and Entrepreneurship 2** of 6 ECTS of semester 2 includes two courses. They complement both the I&E minor specifications (Basics in I&E and BDL prescribed by EIT Digital minor), and the topics about *Impact and use of Data Science in business*.

Innovation and Entrepreneurship 2 code EMUIE20	6 ECTS
Digital IP and Law (coeff 3) code KMUDILU	J.S. Berge (Droit, DS4H)
Entrepreneurship Introduction (coeff 3) code KMUESU	Zakaria Babudtsidze (SKEMA, DS4H)

Overall, the minor in I&E in the EIT Digital UCA Data science track accounts for a total of 24 ECTS.

5.b. Grading Criteria

Grading criteria include:

- [C] Invents or finds solutions to address and solve his/her project main challenges (customer problem, functionality, business model, development,...)
- [I] Drives his project according to the dimensions of (1) customer problem/solution discovery (including in relation to the product technical development) and (2) market discovery (related to strategic thinking) in ways that are relevant for the situation.
- [E] Addresses key steps in a BM/BP/BD project/activity. Plans / diagnoses / recommendations or actions are well supported and appropriate. Identifies appropriate strategies for risk reduction.
- [L] Is able to initiate and carry out design projects, achieve milestones, do problem solving, understand team roles, handle conflicts, negotiate, have good verbal, written and visual communication skills, ability to interact with stakeholders.
- [V] Apply ethical perspectives and theoretical concepts in relation to the topic of the work or its results. Consider and discuss future consequences of these in different situations and/or for different societal groups from a sustainability perspective. Show a solution focused approach.
- [V] Relate the value proposed in his project/study/activity to all relevant stakeholders including producers, customers, shareholders, communities, ecological systems and policies as appropriate

6. Workload calculation (contact hours, homework, exam preparation,..)

For the mini BDL (2 ECTS):

- 20 classroom (10hC, 10h TD), included *the Design Thinking* one-day seminar
- 40 individual and group work

For the on-line / Sakai courses (1 ECTS): 20 hours in total

For the BDL Core (4 ECTS) + additional course (1 ECTS):

Since this module is heavily oriented towards in class preparation work, the amount of expected home work is about 100h

The workload distribution of on-site volume of 50 hours is:

- Coached group work: 20h onsite (C.U.), TDs
- Individual and group work: 14h onsite TPs, (Assistance CU on demand)
- In depth BDL applied lectures (IP, BNC, Go to market, etc ...) by C.U. and external professional: 10h C
- Pitching sessions: 2x3h pitching sessions, TDs

7. Frequency and dates

Once a year

8. Max. Number of Participants

All DSC entry point students must be able to participate

9. Enrolment Procedure

None

10. Recommended Reading, Course Material

Books:

- Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers Wiley Desktop Editions. Authors Alexander Osterwalder, Yves Pigneur. John Wiley & Sons, 2010
- The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company, Volume 1. Authors Steven G. Blank, Bob Dorf. K&S Ranch Publishing LLC, 2012
- Technology Ventures: From Idea to Enterprise; Authors Richard C. Dorf, Thomas H. Byers. Edition 2; McGraw-Hill Higher Education, 2008
- Strategor. Authors Laurence Lehmann- Ortega, Frédéric Leroy, Bernard Garrette, Pierre Dussauge, Rodolphe Durand ; Collection: Livres en Or, Dunod 2013 - 6ème édition - 704 pages - 190x240 mm

Online I&E content for use in blended / flipped class:

- As available from EIT Digital

11. Other Information (e.g. home page of module)

N/A.

Comments:

Basic data (header)	Module ID	Module-ID is the local module or course number that uniquely identifies this module in the university.
	Person responsible	This is usually the professor teaching this course.
1	Prerequisites	Knowledge and skills the participants are expected to have when enrolling.
2	Intended Learning Outcomes	3-5 statements of what the students should know or be able to do after successful completion. Statements should be characterised by (a) knowledge, (b) skills, or (c) competences. (This relates to the European Qualification Framework.)
3	Content	Short list of key words
4	Teaching and learning Methods	Short characterisation whether it is a lecture, lab course, project, seminar or a combination including number of weekly hours, if possible.
5	Assessment	Description of how the assessment takes place and how the grades are calculated. It may be a simple written exam with one grade, or e.g. in case of a seminar a combination of assessment of an oral presentation (1/3) and written seminar paper (2/3).
6	Workload calculation	You should indicate, how the credit points are calculated, e.g.: 4 weekly hours contact time x 15 weeks = 60 hours Assignments: 90 hours Exam preparation: 30 hours Total: 180 hours = 6 ECTS
7	Frequency and dates	Indication, if the course is offered each semester or once a year, and if it is in spring/summer or in fall/winter semester. It should also be indicated, what date the classes usually start and what date the course is finished (including exam).
8	Max. number of participants	In lab courses, projects or seminars, there might be some limitation.
9	Enrolment procedure	Indicate when and how students can register for that module.
10	Recommended reading	If the course is based on some text book, it should be indicated here.
11	Other information	All other information you consider useful, especially the URL of the home page of the course can be put here.