Entrepreneurship Initiative at the Maroun Semaan Faculty of Engineering and Architecture
American University of Beirut

November 27, 2019

Ayman Kayssi
A viable, livable, equitable world
MSFEA Students

- Total: 2900
  - Undergraduates: 2400
  - Master’s: 400
  - PhD: 100
- Female %: almost 40%
- MSFEA fraction of AUB: almost one out of three
Entrepreneurship Initiative

OBJECTIVES

• Transform the Faculty into a powerhouse of innovation and entrepreneurship
• Contribute to the knowledge economies of Lebanon and the region
• Foster links with the growing entrepreneurial ecosystem in Lebanon and the region
• Encourage companies, small to large in size, and networks such as LebNet to build stronger connections with faculty and students
• Graduate students with a solid preparation for entrepreneurial endeavors
• Create a ripple-effect and spread awareness about the importance of entrepreneurship
EI comprehensive program
Covers journey from prospective students to alumni

Initiation
- Outreach
- Design thinking
- Latest trends in engineering
- Innovation and entrepreneurship projects

Capacity Building
- Hackathons
- Mentorship
- Courses
- Competitions
- FYP Accelerator Program
- Innovation Center
- Makerspace

Enabling Spin-offs
- Workshops
- Tailored programs
- Incubating highly innovative research projects
- Technology transfer of intellectual property
Pre-college
Youth Summer Program 2018

200+ applicants
30 participants
2-week intensive program
Hands-on IoT workshops
Team-based projects
Theme: Pollution in Lebanon
8 pitches
2 winning teams
Youth Summer Program 2019

200+ applicants
50 participants
3-week intensive program
Data analytics & AI workshops
Team-based projects
Theme: Social Good
12 pitches
2 winning teams
Goals

• Assuming a leadership role in raising awareness about engineering and the emerging trends for high-school students
• Recruitment of students and identification of exemplary talent (including females and public school students)
• Fostering the innovation and entrepreneurship mindset early on and playing a role in that paradigm shift
• Fulfilling a social role by orienting the youth to use technology and engineering for the social good
Undergraduate
Hackathons

- **2016-18**
  MSFEA-level hackathon in January, with 30-40 participants

- **2019**
  MSFEA-organized hackathon reaching out to all AUB students, with > 100 participants

- **Future**
  Cross-faculty organization effort of campus-wide hackathon of 200+ participants
Entrepreneurship Events

The Entrepreneurship Initiative at MSFEA Presents

A Celebration of MSFEA Student Innovations

Featuring Alumnus Anthony Tayoun
MBA Candidate at Harvard Business School and Co-founder at Deka Robotics
and MSFEA student startups

Date: December 20, 2018
Time: 3 pm - 5 pm
Location: IOEC 6th floor
RSVP: mit34@aub.edu.lb

WHAT YOU NEED TO BECOME AN ENTREPRENEUR:
INVESTMENT AND MORE

MARCH 14 5:00-7:30 ELH

Entrepreneurs’ Talks
Amer Chamseddine
Co-founder and Director, PocketCampus

Nabil Hajj Chehade
VP Product & Technology, Apprentice.io

Internship Program and Startups

One-minute pitches
PFP Accelerator Teams 2018-19

Investment Panel
Moderator
Tanik Kattan
Senior Lecturer at OSIB, AUB

Amel Chahine
Certified Business Angel for Startups

Jad Salame
Managing Partner at Phoenician Funds

Fadi Bioni
Partner at B&Y Venture Partners
Hackathon
- Induct students
- Three day Hackathon
  - Open to all students
  - Goal is to introduce students into the world of entrepreneurship and innovation
  - During Winterm

Course
- Deep-dive and academic support
- For credit course to equip students with the right skills
  - Deep dive into entrepreneurship
  - Spring of third year

Internship
- Real-life experience
- Internship placement in startups, mainly run by FEA/AUB alumni
  - Ability to apply to startup accelerators

FYP
- R&D augmented with business support
- Research and development
  - Augment with business mentorship

Translation Phase
- Translation into the outside real world
- Support the right teams either within AUB (CRinn / Innovation Park) or by funding from external supporters
- Offer 6+ months stipend / salary support to minimize risk on students post AUB

Slide design courtesy of Habib Haddad
FYP Accelerator

**Foundation**
- Design thinking
- Entrepreneurship vs. innovation
- The lean canvas model

**Essentials**
- Value proposition and validation
- The software development cycle
- The hardware development cycle
- Revenue streams and cost structure
- Legal and IP-related issues
- Accounting basics

**Advanced**
- Team management and equity split
- Channel and user growth
- Financial projections and company valuation
- Financing schemes
- Social impact
- Pitching
FYP Accelerator Program

2017-18 edition
https://www.youtube.com/watch?v=-WHGVFbX6tY
Zero-credit
18 applicant teams
7 pitching teams
20,000 USD in awards
2 teams pursuing startup idea
FYP Accelerator Program

2018-19 edition
FEAA 501 in Fall: 0 credits
FEAA 502 in Spring: 3 credits
Proper documentation
28 applicant teams
8 pitching teams
50,000 USD in Awards for 3 teams
DEMO-DAY on April 18, 2019 as part of IDEAS 2019
FYP Accelerator Program

2019-20 edition
FEAA 501 in Fall: 0 credits
FEAA 502 in Spring: 3 credits
36 applicant teams
19 selected teams
10 pitching teams
50,000 USD in Awards for 3 teams
DEMO-DAY in April 2020 as part of IDEAS 2020
STUDENT STARTUP COMPETITION

WHO?
OPEN FOR BOTH UNDERGRADUATE & GRADUATE STUDENTS FROM ALL MSFEA MAJORS. APPLY NOW TO COMPETE TO WIN FINANCIAL AWARDS TOTALING 15,000 USD

DEADLINE 05 11 19
ANY MSFEA STUDENT OR TEAM WITH AT LEAST ONE MSFEA STUDENT WORKING ON A STARTUP IDEA FOR THE PAST THREE MONTHS ARE ELIGIBLE TO APPLY

ENTREPRENEURSHIP INITIATIVE

APPLY HERE
Internships at Startups

Program handled by MSFEA Career Development Center

Increasing number of students and opportunities each year

From local (Beirut Digital District) to international (Silicon Valley), in collaboration with alumni network (LebNet)
Innovation Center and Makerspace

- 3D Printing Studio
- Prototyping tools
- Co-working space
- Access to mentorship
- Flexible space
- Fostering creativity and design
Mentorship Services to all MSFEA Students Pursuing Entrepreneurial Endeavors

HULT Prize, competitions, personal projects

Future plan to host Entrepreneurs in Residence

Open-door policy

On-demand requests

Formalized process for appointment booking
Graduate & Faculty
On-Going Plan

• Roundtable with graduates held in March, 2019
• Leverage the deep-tech and innovative research projects of graduate students
• Offer entrepreneurship workshops and modules to graduate students (ME and PhD) and faculty members
• Incubate highly innovative research projects with business potential
Growing the Network
Internal Collaboration

Grow the pre-college, undergraduate, and graduate entrepreneurship activities
Provide resources to:
• Encourage creation of interdisciplinary teams
• Create a communications platform
• Plan and coordinate entrepreneurship activities and events related to engineering, design, and technology
Community Engagement

- Engagement with MSFEA and AUB alumni in entrepreneurship programs
- Create new programs and initiatives that target a broader base internally and externally
- Assist other entities and organizations in their innovation and entrepreneurship endeavors in the form of pro-bono or consultancy services
Regional and International Collaboration

Exchange Program for FYP Accelerator top teams in collaboration with LebNet
Host guest entrepreneurs
Develop partnerships and collaboration with local, regional, and international universities on various entrepreneurship initiatives:
• Texas A&M – Invent for the Planet
• Virginia Tech – International Entrepreneurship Competition
• American University of Armenia – EPIC Center Exchange Program
Challenges