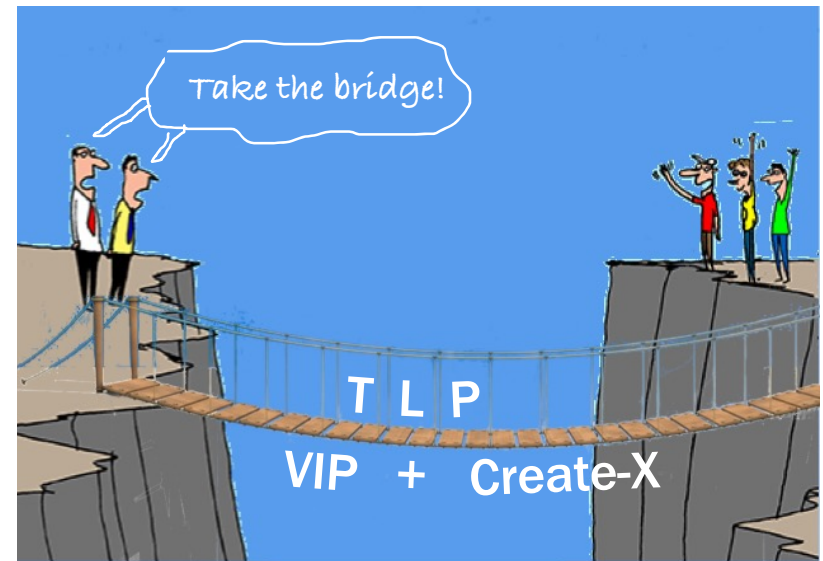# Vertically Integrated Projects– VIP AUB

American University of Beirut
May 11, 2023

VIP Introduced in 21-22 as part of TLP Pilot at AUB
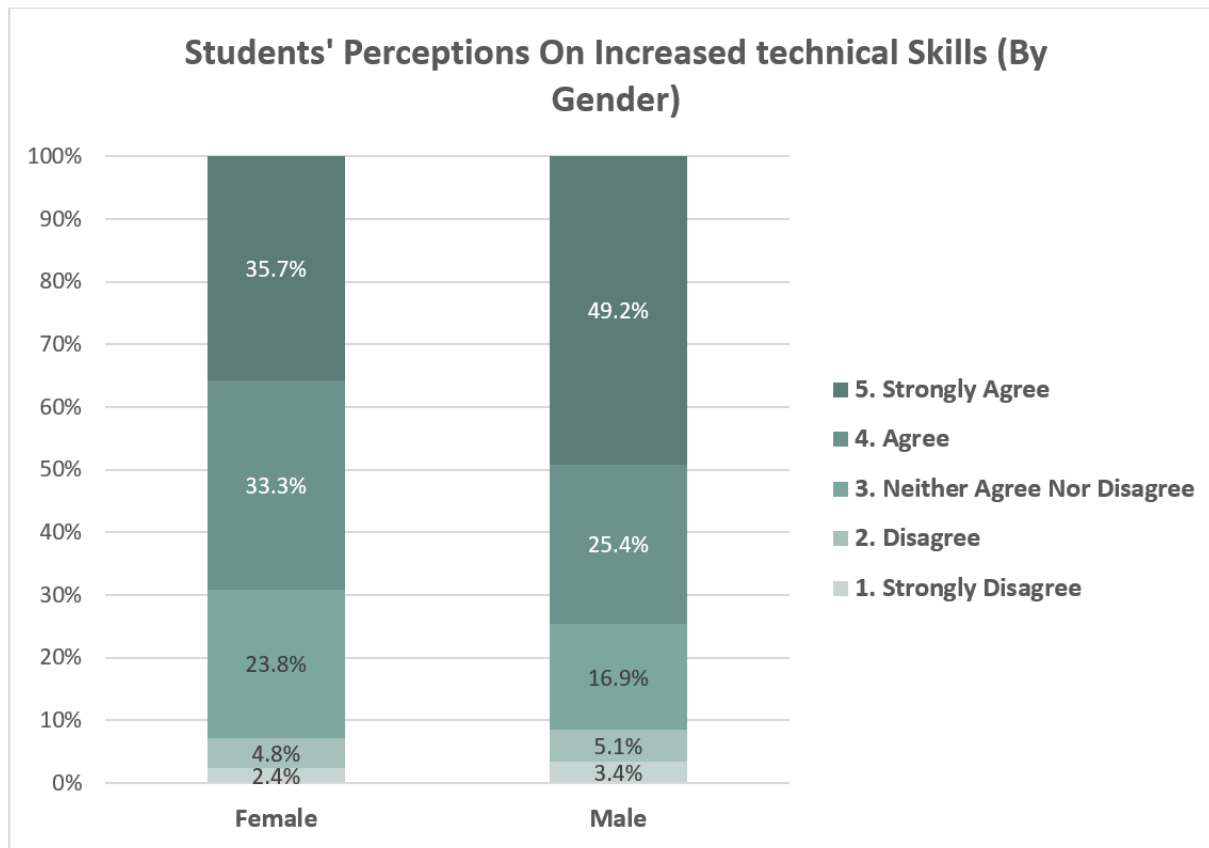
- Bridge the skills gap between industry & fresh graduates

  - **45** AUB students
  - **14** Projects (**3 VIP**, 9 Create-X, 2 Hybrid)
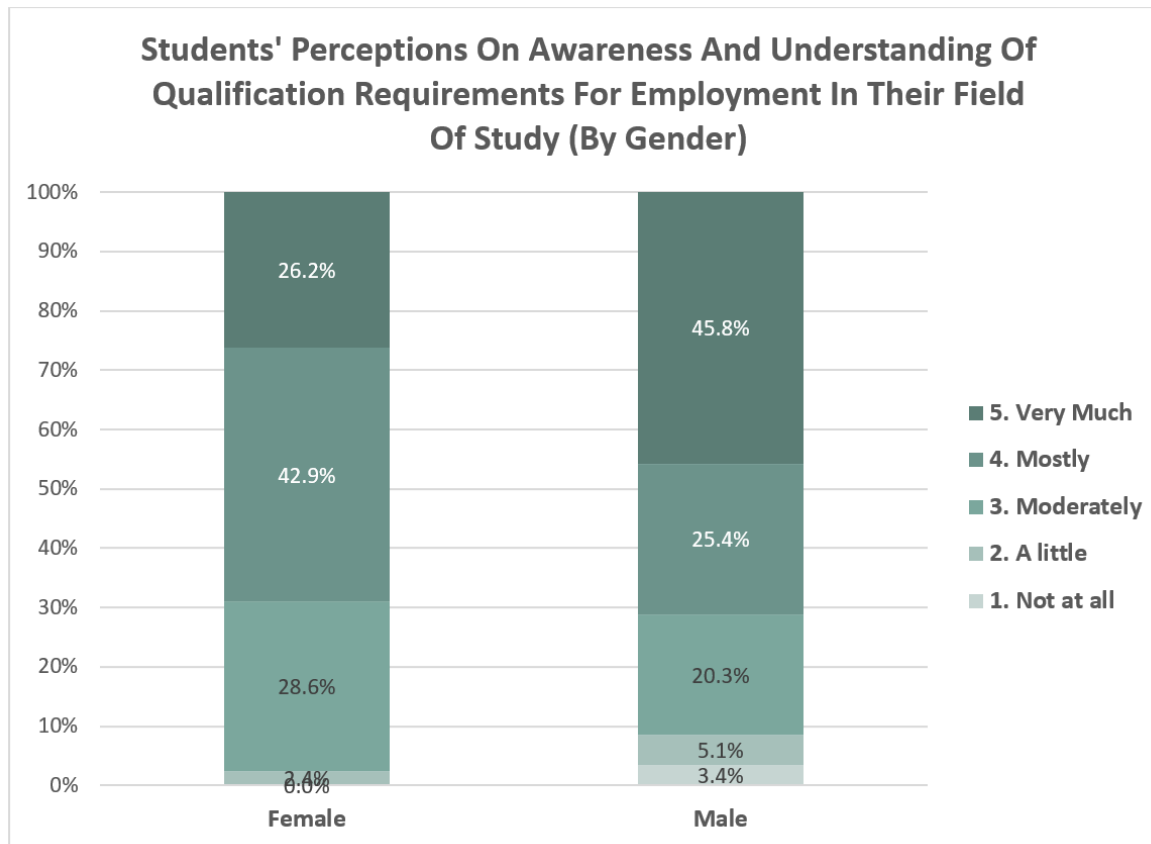 - **23** Faculty mentors
  - **7** Industry partners

Student Satisfaction Feedback from Pilot

Students' Perceptions On Increased technical Skills (By Gender)

Female:
- 5. Strongly Agree: 35.7%
- 4. Agree: 33.3%
- 3. Neither Agree Nor Disagree: 23.8%
- 2. Disagree: 4.8%
- 1. Strongly Disagree: 2.4%

Male:
- 5. Strongly Agree: 49.2%
- 4. Agree: 25.4%
- 3. Neither Agree Nor Disagree: 16.9%
- 2. Disagree: 5.1%
- 1. Strongly Disagree: 3.4%

3

Student Satisfaction Feedback from Pilot

Students' Perceptions On Awareness And Understanding Of Qualification Requirements For Employment In Their Field Of Study (By Gender)
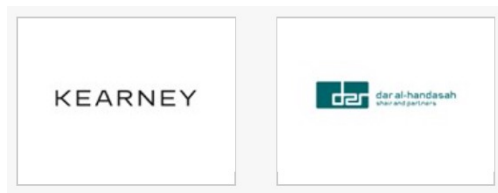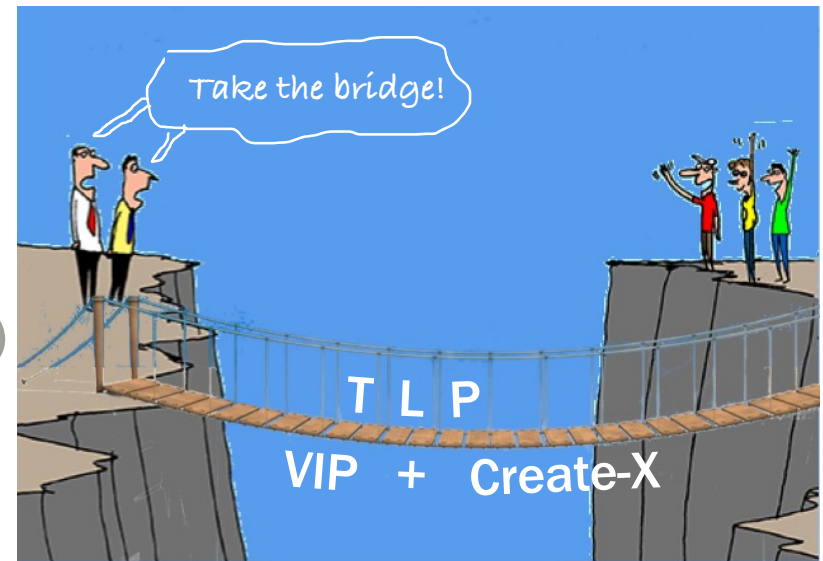
4

VIP Continued in 22-23 as part of TLP (restricted to Tomorrow's Leaders students)

- Bridge the skills gap between **industry** & **fresh graduates**

  - **30** AUB students
  - **11** Projects (**6 VIP**, **2 Hybrid**, 3 Create-X)
  - **14** Faculty mentors
  - **6** Industry partners

Take the bridge!

T L P
VIP + Create-X

KEARNEY

dar al-handasah
shair and partners

المؤسسة العربية للصورة
Arab Image Foundation

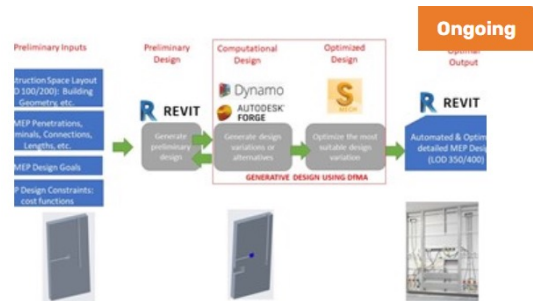Benta Trading

WALLETI

KHOURY
DAIRY

6 VIP Projects
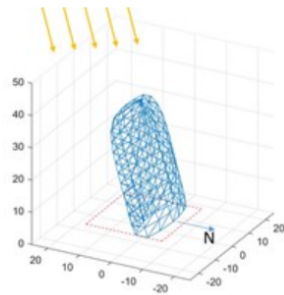
Ongoing

Computer-Based Design Process for Climate Responsive Buildings
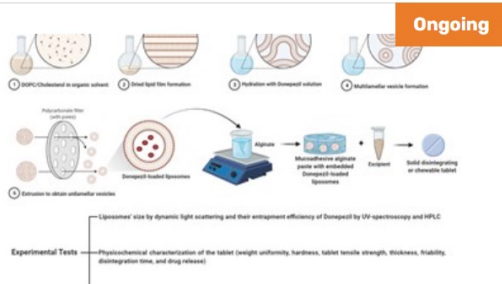

Ongoing

Generative Design for Enhanced 3D MEP Modular Engineering & Construction (GD-MEP)

Ongoing

Developing Digital Interfaces and Designing Metadata Protocols with Photographic Archives in the Arab world

Ongoing

Developing donepezil-loaded liposome nanoparticles for enhanced oral mucosal drug delivery

Ongoing

Recycled Carbon Fiber Composites for Sustainable 3D Printing

Ongoing

Supporting NGOs as agents of change in the MENA region

2 VIP/Create-X Projects

Ongoing

COFED: COrruption and Fraud Eradication using a US patented Device

Ongoing

Enhancing Safety of Dairy Products with a Smart Temperature-Memory Label

VIP Students in 2022-2023

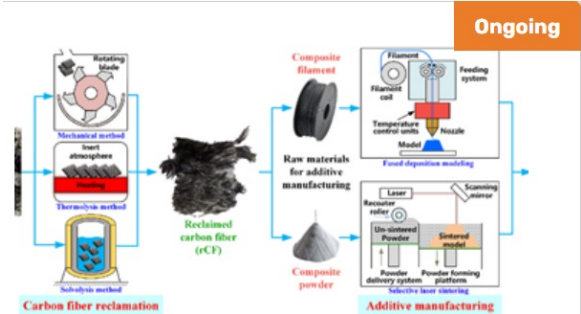| Project	Project Name	Type	Faculty Mentor	Industry Partner	Students	G	Year	Major	Nation
1	Computer-Based Design Process for Climate Responsive Buildings	VIP	Aram Yeretzian, Rabih Jabr	Dar Al-Handasah (Shair & Partners)	Student 1	M	E3	Computer & Communications	Lebanon
					Student 2	M	Senior	Computer Science	Yemen
2	Developing Digital Interfaces and Designing Metadata Protocols with Photographic Archives in the Arab world	VIP	Haidar Safa	Arab Image foundation	Student 1	F	Junior	Social Science	Yemen
					Student 2	F	Senior	Computer Science	Syria
3	Enhancing Safety of Dairy Products with a Smart Temperature-Memory Label	VIP/Create-X	Pierre Karam	Dairy Khoury	Student 1	F	MS	Environmental Science	Lebanon
					Student 2	F	Senior	Chemistry	Lebanon
					Student 3	F	Senior	Chemistry	Lebanon
4	Recycled Carbon Fiber Composites for Sustainable 3D Printing	VIP	Mohammad Harb	Raidy Printing Group	Student 1	M	E4	Mechanical Engineering	Lebanon
					Student 2	M	E4	Mechanical Engineering	Lebanon
					Student 3	M	E3	Mechanical Engineeirng	Lebanon
5	Coworking Brand & Design Towards an inclusive service delivery process: supporting NGOs in the MENA region	VIP	Tania Haddad, Leila Kauli, Yasmeen Makarem	Kearney	Student 1	F	Junior	Political Science	Lebanon
					Student 2	F	Senior	Business Administration	Lebanon
					Student 3	F	Senior	Business Administration	Tunisia
6	Developing donepezil-loaded liposome nanoparticles for enhanced oral mucosal drug delivery	VIP	Rami Mhanna	Benta Trading	Student 1	F	MS	Public Health	Lebanon
					Student 2	M	Sophomore	Biology	Syria
7	Generative Design for Enhanced 3D MEP Modular Engineering & Construction (GD-MEP)	VIP	Hiam Khoury	Dar Al-Handasah (Shair & Partners)	Student 1	F	Junior	Architecture	Lebanon
					Student 2	M	Junior	Computer Science	Algeria
8	COFED: COrruption and Fraud Eradication	Create-X/VIP	Antoine Ghauch	System Expert	Student 1	M	Senior	Business Administration	Tunisia

Integration of VIP and Create-X at AUB

AY 2021-2022 – TLP Courses that were created in the first year of TLP Pilot

Course Number	Course Title	VIP or Create-X	Credits
TLPG 401V	Undergraduate Research Project	VIP	3
TLPG 401X	Technical Entrepreneurship	Create-X	3
TLPG 500	Approved Experience/ Internship	VIP or Create-X	0,1,2, or 3
TLPG 501	Capstone Project 1	VIP or Create-X	1,2, or 3
TLPG 502	Capstone Project 2	VIP or Create-X	1,2, 3, or 4
TLPG 601	Graduate Research Project	VIP or Create-X	3

Courses taken on a **petition**-base to **give credit** for work (TLP **1st Cohort**)

Integration of VIP and Create-X at AUB

Courses taken on a **petition**-base to **give credit** for work (TLP 1st Cohort)

Course	Cr	Faculty/Department Equivalent Courses
		Faculty of Arts and Sciences FAS
TLPG 401-V	3	
TLPG 401-X	3	
TLPG 500	0-3	
TLPG 501	3	
TLPG 502	3	
TLPG 601	3	

Tomorrow's Leaders College-t

Course	Cr	Faculty/Department Equivalent Courses
		Faculty of Engineering MSFEA
TLPG 401-V	3	
TLPG 401-X	3	
TLPG 500	0-1	
TLPG 501	1-3	
TLPG 502	3-4	
TLPG 601	3	

T.E. is Technical Elective

Course	Cr	Faculty/Department Equivalent Courses				
		School of Business OSB				
		ACCT	BUSS	DCSN	INFO	ENTM
TLPG 401-V	3					
TLPG 401-X	3					
TLPG 500	1		245			
TLPG 501	3		247			
TLPG 502	3-4		247			

Integration of VIP at AUB – 2nd Cohort

2nd Cohort of TLP Pilot – **Permanent** Integration in **Engineering (MSFEA)**, **Business (OSB)**, and **Computer Science (CS)**

1. B.S./B.E. Degrees in MSFEA

   - Presented and Approved new TLP courses (presented in Administrative / Curriculum committees)
   - Met with Departments to discuss course equivalencies/integration

2. B.S. in Business Administration (OSB)

   - Met with OSB representatives and agreed on integration

3. B.S. in Computer Science (FAS)

   - Met with CS Chair and agreed on integration

Integration of VIP and Create-X at AUB

2022-2023 - New Courses Created and Approved in MSFEA

**2022-2023** –New TLP Courses that were created during No-cost extension (in blue)

Course	Course Title	VIP or Create-X	Credits	Year
TLPG 101V	Undergraduate Research	VIP	1	1st/Sophomore
TLPG 201V	Undergraduate Research	VIP	1	2nd/Junior
TLPG 202V	Undergraduate Research	VIP	2	2nd/Junior
TLPG 301V	Undergraduate Research	VIP	1	3rd/Senior
TLPG 302V	Undergraduate Research	VIP	2	3rd/Senior
TLPG 401V	Undergraduate Research	VIP	3	3rd+
TLPG 401X	Technical Entrepreneurship	Create-X	3	3rd+
TLPG 500	TLP Internship	VIP or Create-X	0,1,2, or 3	-
TLPG 501	Capstone Project 1	VIP or Create-X	1,2, or 3	4th+/Senior
TLPG 502	Capstone Project 2	VIP or Create-X	1,2, or 3	4th+/Senior
TLPG 601	Graduate Research	VIP or Create-X	3	Year 1
TLPG 602	Graduate Research	VIP or Create-X	3	Year 1 or 2

Integration of VIP beyond TLP

Plan for 2023 – 2024
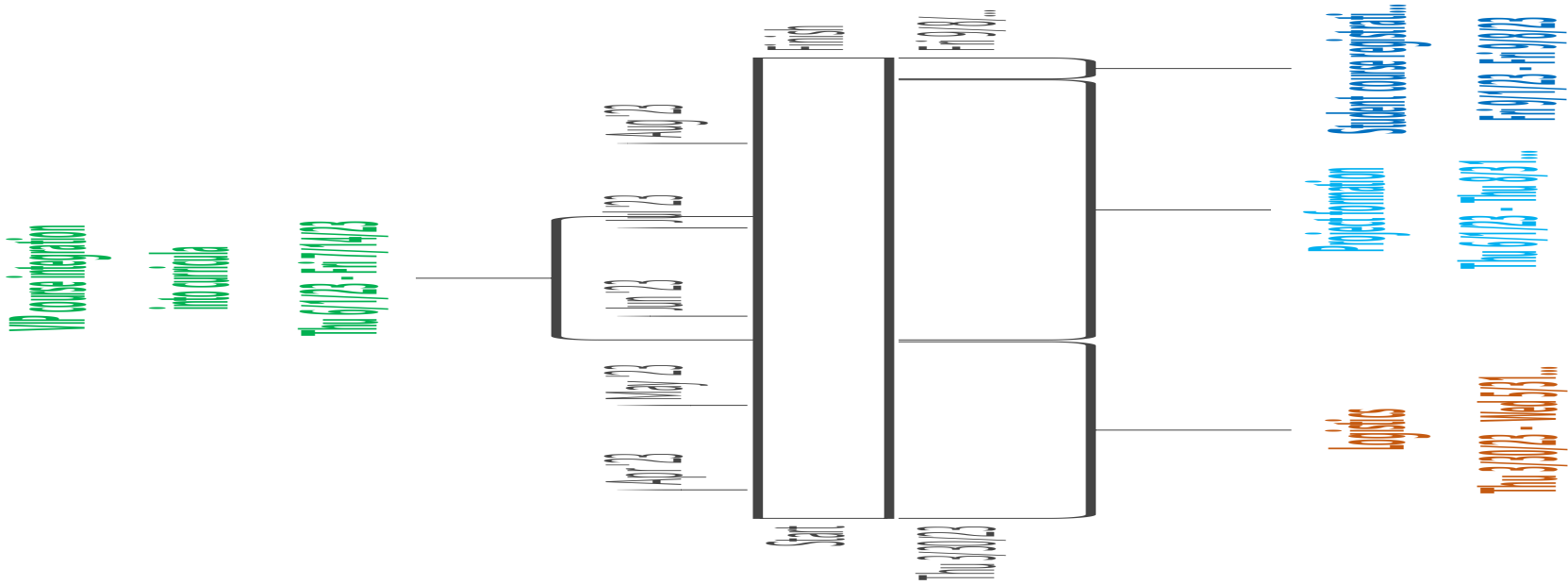
Integration of VIP at AUB (2023-2024)
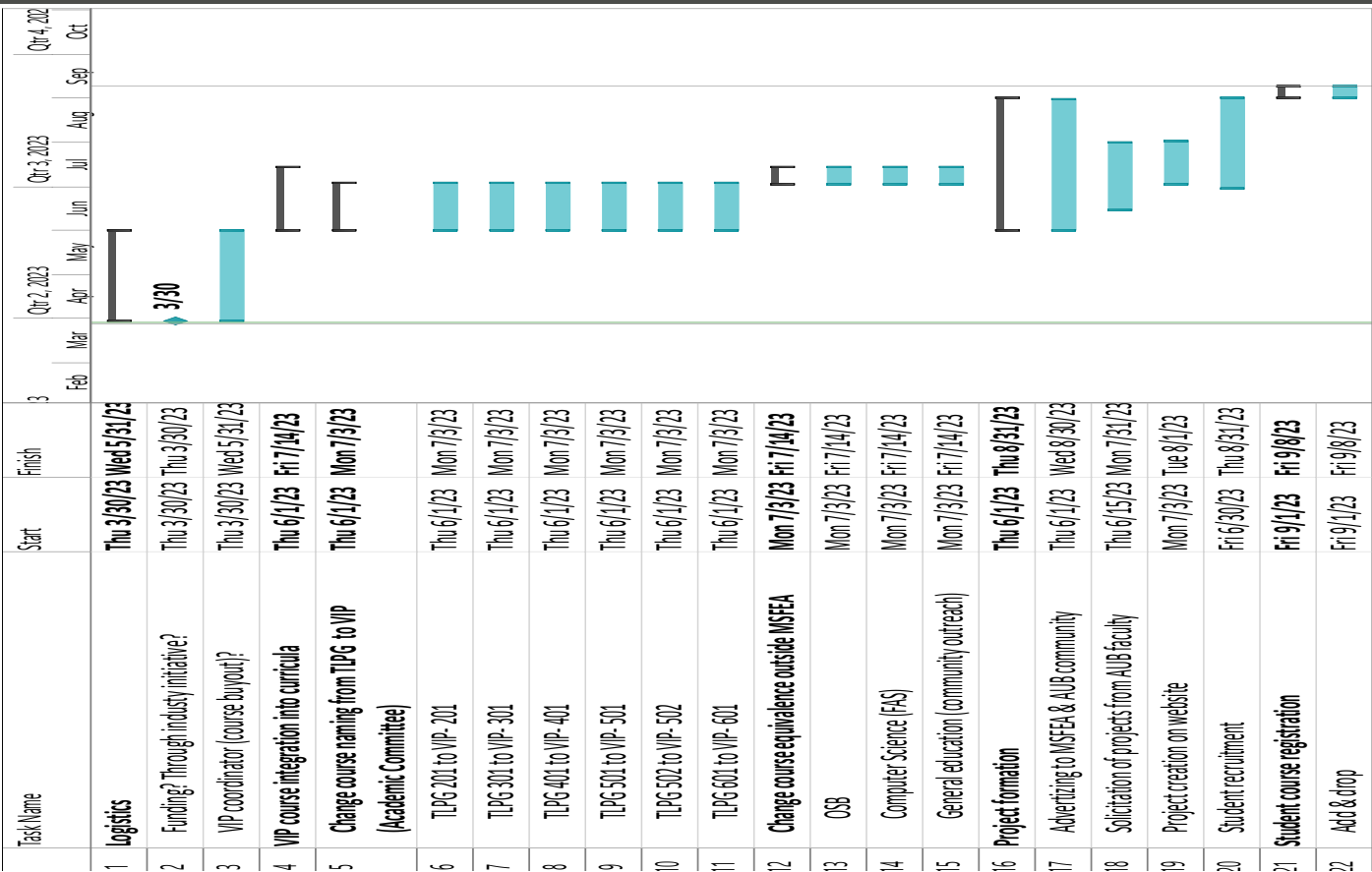
Pictures from Entrepreneurship Bootcamp (attended by VIP Students)

Tomorrow's Leaders College-to-Work Pipeline Pilot (TLP)

Pictures from Entrepreneurship Bootcamp (attended by VIP Students)

Pictures from Entrepreneurship Bootcamp (attended by VIP Students)

Pictures from Entrepreneurship Bootcamp (attended by VIP Students)

Thank You – VIP AUB