Entrepreneurship Education at QREC

~ for realizing innovation in SDGs ~

Kyushu University & UC San Diego Joint Webinar Series

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QREC is a center for providing **entrepreneurship education** and engages in **research** on it in Kyushu University.

- Established in December 2010, with Dr. Robert T. Huang's donation

QREC curriculum

- 31 courses in a year
- To raise Entrepreneurial Thinking and Acting
- Many of the courses use the **Project-Based Learning** approach
- Students acquire the knowledge and skills necessary to be an entrepreneur

I wish QREC produces more and more students like me who are willing to take on new business challenges.

Student Initiative Programs

- Financial support for students' unique activities (¥100,000 ~ ¥500,000)
- Provides places for the activities



Dr. Robert T. Huang

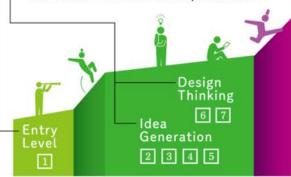
QREC curriculum

Basic system subjects - Entry Level Education designed to make students realize the important of understanding social "issues" and "taking action" - Finance to make their own dreams come true. Idea Generation ing funds. Students receive training in "idea

generation" methods for resolving issues.

Design Thinking

"Design Thinking" has students work in teams to identify issues from the perspectives of people's needs, technology, and business and then think up solutions.



Marketing/Strategy

Students learn how to understand market generation and business strategies.

Students learn methods for procur-

Organization

Students learn how to build organization/ team for carrying out projects.



Knowledge/Tool

Marketing/Strategy

Organization 16-1 16-2

Finance 14 15

8 9 10-1 10-2 11 12 13

Integrated system subjects



Motivation —

Knowledge/Tool ___ | Integration

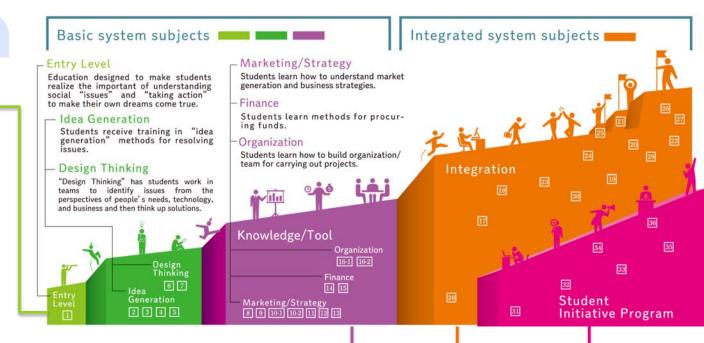
QREC curriculum

Motivation

Students get inspiration to change the world better place with their own ideas

Knowledge/Tool

Students gain knowledge and skills necessary to bring their ideas to real world



Integration

Students endeavor to actually put what they have learned into practice based on their knowledge and understanding of methodology

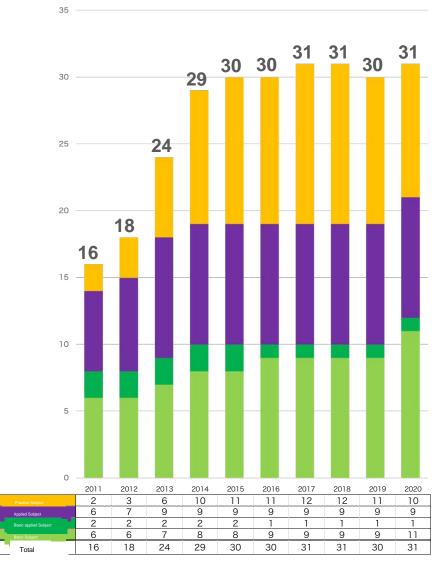
S.I.P.

<Non-credit>

QREC supports students' ideas and makes them learn from practice

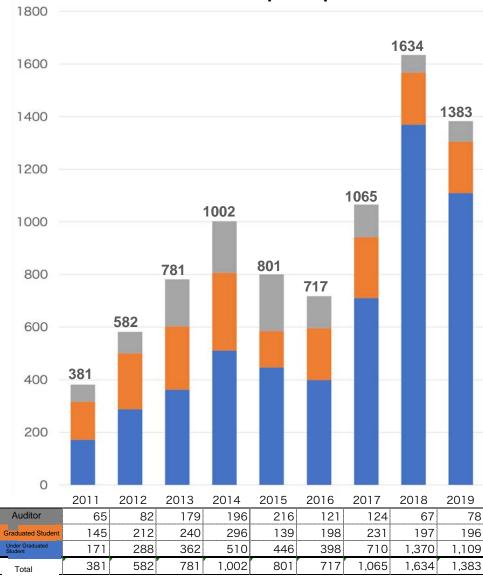
QREC curriculum

Transition of the number of courses



Activities

Transition of the number of participants



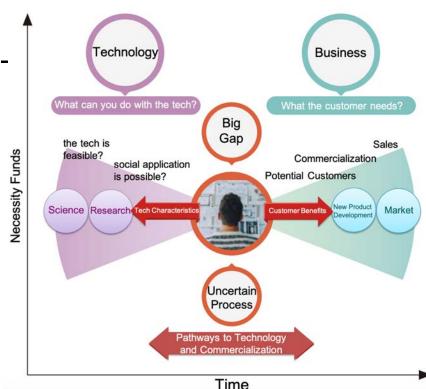
Advanced Lecture in Idea Evaluation

Purpose

 To learn how to commercialize universityoriented science and technology

What to do

- Students learn about the purpose, significance, and effects of industryacademia collaboration
- Students learn about the Idea
 Evaluation method through case studies
- Students use a technology
 assessment tool called "Quicklook" to
 conceptualize a business idea and
 develop a market entry strategy
- Finally, they do presentation to VCs and specialists







SDGs Entrepreneurship

Purpose

- To deepen their knowledge of social business
- To identify social issues through 10-day fieldwork in emerging countries
- To propose social businesses to solve these issues

What to do

Before fieldwork

Students learn about current issues on a global scale, the SDGs set forth by the United Nations, and the business model of social entrepreneurs

During fieldwork

Students visit the site, identify issues as a team, and come up with a business plan to solve the problems

After fieldwork

Students present more practical problem-solving plans in the academic conference





































Entrepreneurship Bootcamp

Purpose

- To acquire practical knowledge about entrepreneurship
- To cultivate global perspectives and actively create new business ideas through fieldwork in the US

What to do

Before fieldwork

Students learn the knowledge and practical techniques necessary for startups, then they prepare their own business plans using technology and other resources

During fieldwork

Students brush up their own business plans through entrepreneurship programs at MIT, Babson collage and other facilities

After fieldwork

Students present more practical business plans in front of some investors







Student initiative Program (S.I.P)

Idea Battle

Students' projects in the ideation phase

→ Supporting up to ¥100,000 per project

Challenge and Creation (C&C)

Students' unique & creative projects

→ Supporting up to **¥500,000** per project

Academic Challenge (AC)

Grant for graduate students who has their own research idea up to **¥500,000** per person

Jump Out Challenge (JOC)

Providing opportunities for applying business contests in Japan

Global Challenge and Creation (GCC)

Providing opportunities for applying business contests in Japan



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Student initiative Program (S.I.P)

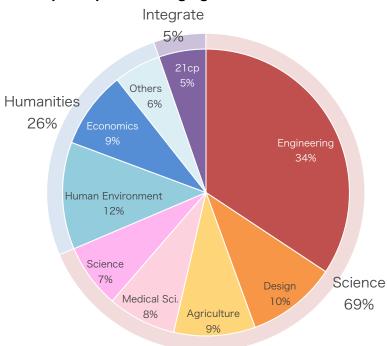
Activities

SIP Number of applicants

# of participants	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
G.C&C	-	-	-	-	4	9	5	8	6	3	35
J.O.C.	-	-	-	ı	-	7	2	0	8	0	17
AC	18	9	10	9	8	8	6	6	7	6	87
C&C	46	29	47	41	49	70	90	65	106	29	572
ldea Battle	-	-	-	-	18	30	49	42	78	33	250

# of project	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	TOTAL
G.C&C	-	-	-	-	1	3	1	5	2	1	13
J.O.C.	-	ı	-	-	-	1	2	0	2	0	5
AC	18	9	10	9	8	8	6	6	7	6	87
C&C	11	9	10	10	10	9	9	7	7	10	92
ldea Battle	-	-	-	-	8	10	14	13	20	15	80

The breakdown of departments which successive C&C participants belonging to



SIP Awarded projects

Term	Project Name	Representative	Contest Name	Award
August, 2015	Development of a wind direction variable revolve type wind tunnel	Joshua LAWN	TECO Green Tech 2015 (Taiwan)	The highest technology
August, 2016	Development of next-generation wind power	Yuya Otaki	TECO Green Tech 2016 (Taiwan)	Silver Popular award
November, 2017	Development of pathological image diagnosis software using	Osamu Izuka	Asian Night (America)	Second place
	deep learning		Live Sharks Tank® episode 53 (America)	First prize
May, 2018	Distributed cold storage for vegetables and life-saving drugs without electricity	Mahbubul Muttakin	Hult Prize Japan tournament	First prize
March, 2019	Development and sales of sea rescue request device under waterfall situation	Keisuke Chiba	JBMC (Japan Business Model Competition)	Excellent award

Ants, Silkworms and People, Co-working System

To create a system for sustainable production of silk woven products through collaboration among silkworms, tailer ants, and people.















Student Initiative Program (S.I.P.)

Itoshima Gibier* Project * Gibier is a French, which means game animals such as wild boars and deer.

To create a sustainable woodland eco-system through the balancing between wild animals and farming.











Development of Marine Rescue Device

Device and service that provide immediate emergency notification in marine accidents















Student Initiative Program (S.I.P.)

Cold storage for vegetables, drugs, vaccines without electricity

Bangladesh students creates the idea to spread cold spaces for storing vegetables in an environment without electricity in their home country.





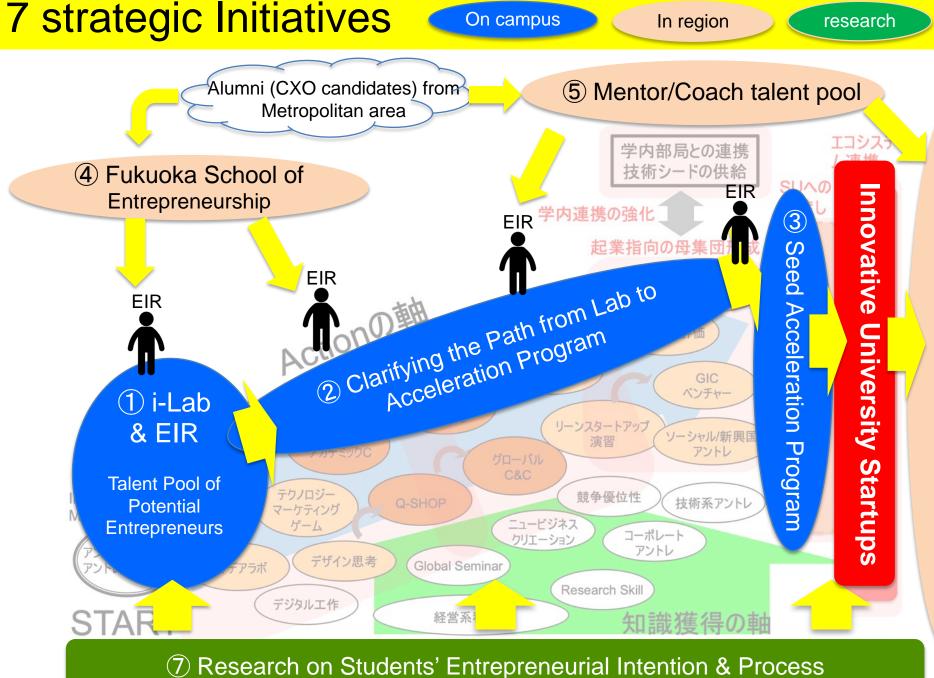








Strategies for next decade



Thank you!