



INDUSTRY-UNIVERSITY TASK FORCE

The READI (Risk Management, Economic Sustainability and Actuarial Science Development in Indonesia) project aims to increase the number and quality of Indonesian actuarial science graduates to address the country's growing demand for actuaries. In collaboration with Government of Indonesia, insurance industry, key university partners and the *Persatuan Aktuaris Indonesia* (PAI), the READI project aims to develop Indonesia as a center of actuarial science excellence. Project efforts will supplement the Otoritas Jasa Keuangan (OJK)'s 1,000 Actuaries program by providing gender-equitable opportunities and support for innovative, high-quality actuarial science education, certification and professional development.

Development of the actuarial science milieu in Indonesia continues to face several key challenges. This includes:

- 1). a severe shortage of Indonesian-educated actuaries to work in government agencies and the insurance, pension and financial risk management sectors;
- 2). an inadequate number of formalized actuarial science programs in Indonesian universities;
- 3). shortage of suitably qualified, certified actuarial science lecturers;
- 4). limited opportunities for actuarial science students to obtain practical, hands-on experience while studying;
- 5). limited resources for and capacity of the PAI to provide the level of services needed to facilitate rapid development of the actuarial science sector; and
- 6). low public awareness regarding actuarial science and related career opportunities.

In recognition of the need for concerted efforts to address these challenges, the READI project supported and facilitated the formation of an **Industry-University Task Force (IUTF)**.

The IUTF brings together key stakeholders from the Indonesian insurance industries, partner universities, the OJK, Pusat Pembinaan Profesi Keuangan (PPPK), Ministry of Research, Technology, and Higher Education (Kemenristekdikti), and the READI technical team to identify strategies and solutions to help overcome the challenges hampering actuarial science education in Indonesia.

WORKING GROUPS

To increase the efficiency and productivity of the IUTF, several thematic working groups have been formed namely:

- Co-operative Education Working Group
- Math Outreach and Public Education on Actuarial Science Working Group.
- Applied Actuarial Science Research Working Group.
- Recruitment and Development of Actuarial Science Leturers

Each working group will lead in identifying key challenges and opportunities related to the respective topic and will recommend strategies and efforts to help mitigate related challenges or exploit untapped opportunities. As active members of the actuarial science community, working group members will also help to link the READI project with industry, higher education and government actors who are well-positioned to support achievement of project objectives.



CO-OPERATIVE EDUCATION WORKING GROUP

In January and February 2017, visits were made to all nine partner universities and five employers in Jakarta, Bandung and Yogyakarta for socialization, awareness-raising and a preliminary study of existing internship programs. The employers included; Manulife, Sun Life, AAUI, Prudential, and AXA. The Indonesian Ministry of Research, Technology and Higher Education was also visited To explore opportunities and challenges in developing co-op education programs in Indonesia.

These sessions raised awareness and provided a comprehensive understanding of Co-operative Education and Work Integrated Learning (WIL) program systems both from the perspective of the universities and industry. This allowed for the confirmation of expectations regarding Co-op education programs from the university and industry points of view, building linkages between university partners and employers. It also allowed for the collection of baseline data to support the co-op program. Two universities, Prasetiya Mulya and Universitas Pelita Harapan (UPH) have subsequently stepped forward and expressed an interest in piloting co-op education programs

Action Plan :

1. Clarify government policy and regulatory setting to enable and support growth in co-op education and WIL programs.
2. Build support among universities, employers and governments to increase participation in WIL program.
3. Develop university resources, processes and systems to grow Co-op Education and WIL and engage business and community partners.
4. Build capacity for more employers to participate in Co-op Education and WIL program.
5. Ensure that investment in co-op education and WIL is well targeted and enables sustainable, high quality experiences, stakeholder participation and growth.
6. Next Co-op Education Working Group Meeting will be held in July 2017





MATH OUTREACH AND PUBLIC EDUCATION ON ACTUARIAL SCIENCE WORKING GROUP

READI's Math Outreach Team travel to various cities in Indonesia to deliver outreach talks and events about actuarial sciences to increase awareness of the actuarial profession among selected target groups including high school and university students, teachers, and parents.

"Think about Mathematics" events were held at various public and private schools in Jakarta, Bogor, Bandung, and Malang to demonstrate that Math is fun, relevant, and leads to exciting careers. Strong interest in READI's math outreach to schools program was exhibited and in response bilingual math outreach materials were developed with more in the pipeline.

The "Think About Actuarial Science" events conducted in cooperation with various universities targeted high school students, teachers and parents. READI collaborated with the University of Indonesia's annual LOGIKA event, Pelita Harapan University's INFINITICS event, Prasetya Mulya University's Actuarial Science Day 2017, which enabled the project to expose hundreds of students and parents to innovative mathematics teaching techniques and the actuarial science profession.

Action Plan :

1. Deeper coordination with universities and industry is needed to conduct Think About Actuarial Science events either via education fairs, university fairs, or mathematics competitions.
2. Collaboration with Ministry of Education and Culture during annual education fair events in September or October 2017.
3. Development of promotional tools for the mathematics outreach program.
4. Next working group meeting will be held in July 2017.

APPLIED ACTUARIAL SCIENCE RESEARCH WORKING GROUP

The working group meeting held on April 26, 2017 mainly focused on the preparation for the Call for Research Proposals with the following details (timeline as per April 2017):

Date	Activity
9 th May 2017	Call for research proposals (for 10 weeks)
14 th July 2017	Deadline for submission 23.59 WIB
July-August 2017	Shortlisting (Note: include working committee meeting to finalize recipients for applied research grants on 10 th August-12 th August 2017))
22 nd August 2017	Award announced
September 2017-February 2018	Research commences
1 st Week March 2018	Final papers, posters, and short videos presentation to be collected and hand over to READI team
2 nd Week April 2018	READI Conference
3 rd Week April 2018	Grants final report (financial) to be hand over to READI team

Working group requested to have 15 papers with each funded up to IDR 75 million, as the working group strongly supports the importance of this research to highlight the Indonesian actuarial milieu. In relation to the commissioned public interest papers, the topics that working group would like to concentrate on include; Actuaries and Social Security, and Identifying Gender Issues/Gaps in the Actuarial Milieu in Indonesia.

Action Plan :

1. Fund raising for the actuarial science applied research (to ensure the sustainability of the actuarial science applied research activities).
2. Develop an Indonesian actuarial journal.
3. Next working group meeting is planned in July 2017.

RECRUITMENT AND DEVELOPMENT OF ACTUARIAL SCIENCE LECTURERS WORKING GROUP

To strengthen capacity of actuarial science and risk management teaching professionals in Indonesia, actuarial science mentoring is provided through short courses, e-courses and workshops supported by READI. The short courses prepare lecturers to sit for PAI exams.



Two short courses – Actuarial Mathematics I and II – were held in January and May 2017 delivered by Professor David Landriault from University of Waterloo. Thirty-two participants (14 female and 18 male) representing math and science faculties from eight universities (ITB, IPB, UGM, UI, ITS, UPH, UPM and UNPAR) along with OJK and PPPK/Ministry of Finance attended the course. The courses were well received with very positive feedback provided by course participants.

OTHER EVENTS IMPLEMENTED (Jan – May 2017)



- Think about Actuarial events at University of Indonesia (Jan 2017), Pelita Harapan University (March 2017) and Prasetya Mulya University (May 2017) with A total of 846 (538 male and 306 female) students participated in those events.
- Actuarial Talk Show at Pelita Harapan

University on March 30, 2017

- MoU signing between READI Project and Pelita Harapan University on April 10, 2017.
- MoU signing between READI Project and Prasetya Mulya University on April 11, 2017
- Fundamentals of Co-Operative Education Training for University Partners on April 10 – 11, 2017 at Pelita Harapan University and Prasetya Mulya University.
- Fundamentals of Co-operative Education Training for Employers on April 18, 2017 at the Mandarin Hotel, Jakarta.
- Workshop on the Role of Actuaries in Assessing Risks Associated with Climate Change held with 200 participants in Jakarta on May 9, 2017
- 12 visits to high schools for the “Think about Mathematics” events conducted from January – May 2017 in Jakarta, Bogor, Bandung, and Malang which were attended by 728 (318 male and 410 female) students.

UPCOMING EVENTS (June – September 2017)

- Recruitment and Development of Actuarial Science Lecturers Working Group meeting on June 13, 2017.
- Study Visit to the Faculty of Actuarial Science and Department of Co-operative Education and Career Action, University of Waterloo (July 2017) – to include representatives from Ministry of Research, Technology and Higher Education, two partner universities, insurance industries.
- Actuarial Science Day (July 2017) in Bandung
- Applied Actuarial Science Research Working Group meeting on June 12, 2017
- Math Outreach and Actuary Science Public Education Working Group meeting in July 2017 (date TBC)
- Co-operative Education Working Group meeting in July 2017 (date TBC)