

2019

ACADEMIC INTELLECTUAL
INTERNATIONAL INVENTION,
INNOVATION & DESIGN BOOK

Published by : Student Affairs Department,
Universiti Teknologi MARA Kedah,
P.O. Box 187, 08400 Merbok, Kedah, Malaysia.

Patron : Dr. Wan Irham Ishak
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ISBN : 978-967-0314-71-6

Printed by : Perpustakaan Sultan Badlishah,
Universiti Teknologi MARA Kedah,
P.O Box 187, 08400 Merbok, Kedah, Malaysia.

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INNOVATION

CATEGORY

LinProT: AN INNOVATIVE COURSEWARE WITH INTEGRATION OF AUGMENTED REALITY FOR OPTIMIZATION METHODS

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During the 4th Industrial Revolution, students were not only expected to be wise in obtaining information to support the development of the existing knowledge of the instructors, but they were expected to have the wisdom to optimize their knowledge as well. Ministry of Higher Education has introduced the Higher Education 4.0 (MyHE 4.0) theme which included the Teaching and Learning 4.0 process in the universities which included the latest technology utilization. Thus, researcher decided to develop an innovative educational courseware in Optimization Methods (OM) course for MyHE 4.0, named LinProT. The objectives in developing LinProT are producing courseware containing self-direct learning elements that meets the needs of students in OM course and assess its feasibility. An instructional design model named ADDIE model would guide LinProT's development. There are three types of modules that fulfill the curriculum and course learning objectives in OM course contain in LinProT, which are notes, exercises and tutorial videos. It consist multimedia elements package; short video tutorials, scanned pictures by using Augmented Reality (AR) and connection to other calculation software packages. LinProT has been said to be the next best thing and will be the future of the education industry. It encourages the students to be immersed with this courseware in OM course and students can choose the learning materials freely. It is also potentially to be marketed to institutional students as learning tool. LinProT will produce dynamic learning atmosphere for students and instructors as well as improving their interest in teaching and learning process.



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ISBN 978-967-0314-71-6



9 789670 314716