UNIVERSITI TEKNOLOGI MARA

MAT082: MATHEMATICS I (ADVANCED)

Course Name (English)	MATHEMATICS I (ADVANCED) APPROVED
Course Code	MAT082
MQF Credit	4
Course Description	This subject is a continuation of basic mathematics, MAT 081. the mastery of mathematics concept at SPM level was further strengthened so that the students can understand in depth and widen its usage. the topics of this subject comprise solving problems related to applications of differentiation, application of integration, movement of a particle along a straight line, matrices and bearing, angle of elevation and angle of depression.
Transferable Skills	Ability to identify and use basic knowledge in Mathematics. Ability to solve and generate the mathematicals problems.
Teaching Methodologies	Lectures, Tutorial
CLO	CLO1 Identify the concept of differentiation, integration and matrices. CLO2 Use the properties of differentiation, integration, and matrices in algebraic operations. CLO3 Solve the problems dealing with bearing, angle of elevation and angle of depression. CLO4 Solve related problems of motion in straight line using differentiation and integration. CLO5 Generate the equation based on related problems.
Pre-Requisite Courses	No course recommendations

Reading List	**Recommended Text**	• **Moy Wah Goon, Ooi Soo Huat, Wong Teck Sing and Jessy Chia 2011, *FOCUS 4U Additional Mathematics SPM Form 4,5*, Third Edition Ed., Pelangi [ISBN: 9789830057811]**
	Reference Book Resources	• **Hass, Weir and Thomas 2012, *University Calculus*, Pearson International Edition Ed., Pearson [ISBN: 0321416309]** • **Robert T Smith, Roland B. Minton, Nor Hanim Abd Rahman, Faridah Hussin and Koni Md Taha, *Basic Calculus for Science and Engineering*, 2012 Ed., McGraw-Hill Education [ISBN: 9833219993]** • **Howard Anton and Chris Rorres 2013, *Elementary Linear Algebra*, 9th Ed., Wiley [ISBN: 0471449024]** • **Howard Anton, IRL Bivens and Stephen Davis 2013, *Calculus*, 10, Wiley [ISBN: 978111809248]**
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	