

**Universiti Teknologi MARA**

**Computer Science Student  
Competency System (CSSCS) for  
Computational Mathematics  
Program (CS227)**

**Nur Eluny Binti Suhaimi**

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requirements for  
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May Allah S.W.T grant goodness. Amin

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## **ABSTRACT**

This project is about a development of a system which would match the competency of students with the industry demands. Students will be evaluated by the supervisor and industry supervisor during the class and also by the student industrial training for every semester. This project is mainly about the evaluation and matching of student competency with the industry requirements. This project is about the evaluation and matching of student competency with the industry requirements. The project is also about closing the gap between the industry demands and the university supplies of graduates. The system will provide information regarding the current industry skill requirement and job prospect. The system will also provide a guide for student to pursue their career of choice. The system will be developed using Ruby on rails framework which is currently used in the industry. The objective of the project is identify the technical skills needs by industry for Computational Mathematics (CS227) graduates based on job opportunities, to identify the user requirement for student competency system, to design a system that can map the industry needs and university supplies and to develop a system that can map the industry needs and university supplies. The scope of the project is the Computational Mathematics (CS227) of Faculty of Computer and Mathematical science in UiTM Shah Alam. The system is originally developed for the High-End Industry Graduates Internships Program (HEIGIP). The analysis and finding are analyzed to accomplish the objective of the research. The methodology used to develop the system is Rapid Application Development. All the objectives were accomplished throughout the whole development process of the project. There are some recommendations for future improvements of the system such as upgrade the existing system to a better and more functional system, implements in each university to help all the students in university, maintain the system by checking it thoroughly in every aspects of the system, add more function to the system so that it will be more useful, provide a simple User Interface so that users wouldn't have a hard time using it, always check for error in the system to prevent any major breakdown, add other evaluation criteria such soft skills, improve the evaluation standard.

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# CHAPTER 1

## INTRODUCTION

This chapter provides details about the general view of the project on every aspect in specific details. This chapter highlight on the general background, problem statement, project aim, objectives, scope and also significant of the system.

### 1.1 Background of the study.

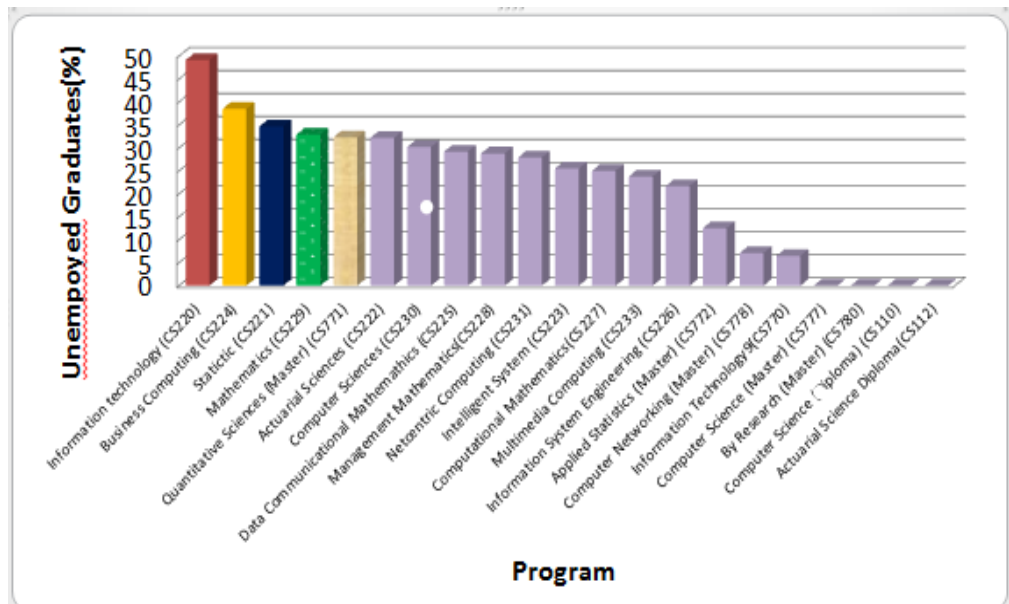


Figure 1.1: Status of Unemployed Graduates FSKM (UiTM Shah Alam) 2011

Based on the graph above, it is about the statistic of unemployed graduates from the Faculty of Science Computer and Mathematic, UiTM Shah Alam in 2011. It can be seen that students in this faculty are having a hard time in getting a job that is related to their specific field for duration of six months since their graduation day. The highest unemployed graduates are from the Information Technology course while the lowest is from the Information system engineering course and followed by the others.