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**MARKET SURVEY FOR MASTERS OF SCIENCE (MSc) in RELIABILITY ENGINEERING PROGRAMME**

Razak School of Engineering & Advanced Technology, Universiti Teknologi Malaysia (UTM) Kuala Lumpur is conducting a market survey to gather views and information from engineering and technical-based companies. We invite your participation to give feedback to assist us in designing the MSc in Reliability Engineering curriculum structure and to match the manpower of Malaysian industrial sector.

The information gathered will be treated as STRICTLY CONFIDENTIAL.

We thank you for your participation.

***Note:***

Please respond to the survey before **7 December 2012** by mailing, shamsul@ic.utm.my (Dr Shamsul Sarip) or fax it to +603 2693 4844.

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 Tel: +603 2615 4265

 Fax:+603 2693 4844

Thank you in anticipation of your prompt respond.

**PROGRAMME SUMMARY**

|  |  |  |
| --- | --- | --- |
| 1 | *UNIVERSITY* | Universiti Teknologi Malaysia (UTM) |
| 2 | *ACADEMIC PROGRAMME* | Master of Science in Reliability Engineering |
| 3 | *FACULTY* | UTM Razak School of Engineering and Advanced Technology, Kuala Lumpur. |
| 4 | *PROGRAMME OBJECTIVE* | This Master of Science programme in Reliability Engineering is aimed to produce an engineer equipped with a broad, rigorous, application oriented and contemporary understanding in reliability engineering that prepares him to expand boundary of knowledge. Graduates in this programme are expected to become an anticipative engineer who can disseminate advanced knowledge and use concepts from reliability engineering to approach unforeseen problems.  |
| 5 | *STUDY DURATION* | Full TimeMinimum : 1½ Yrs Maximum : 3 | Part TimeMinimum : 3 YrsMaximum : 6 Yrs |
| 6 | *OFFERED COURSES* | Proposed MSc in Reliability Engineering (Taught Course)* Advanced Engineering Mathematics
* Scientific Computing for Engineering
* Reliability and Quality Analysis
* Elements of Engineering Reliability
* Reliability Based Design
* Reliability of Offshore Structure
* Fatigue and Fracture Mechanics
* Corrosion in Marine Environment
* Materials Selection and Design
* Computational Method in Solid Mechanics
* Maintainability Engineering
* Free Electives
 |

**Name :**

**Organization / Industry :**

**Telephone (O) :**

**Position :**

**MARKET SURVEY FOR MASTERS OF SCIENCE (MSc) in RELIABILITY ENGINEERING PROGRAMME**

The results of this survey will be used to assist in the development of a new Masters of Science in Reliability Engineering programme at the Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia (UTM).

All replies are anonymous unless you choose to add your name and contact details.

This survey consists ofthreeparts:

**PART I**: Contents of programme its relevance to needs of organizations.

**PART II**: Career opportunities / development.

**PART III**: Others (Sponsorships and outcome of the programme).

**LAMPIRAN 2B**

**MARKET SURVEY FOR PROGRAMMES TO BE OFFERED**

**MASTER OF SCIENCEINRELIABILITY ENGINEERING**

**UTM RAZAK SCHOOL OF ENGINEERING AND ADVANCED TECHNOLOGY**

**Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PART I : CONTENTS OF PROGRAMME ITS RELEVANCE TO NEEDS**

 **OF ORGANISATIONS**

**[Please tick ( / ) where applicable]**

State the type of organisation / industry :

 i. Locally owned organisation / industry

 ii. Foreign owned organisation / industry

**a. Fulfillment of Theory and Concept**

1. Does the programme fulfill the basic theories required in the related discipline?

|  |  |
| --- | --- |
|  | Fully |

|  |  |
| --- | --- |
|  | Partially |

|  |  |
| --- | --- |
|  | None |

2. Are the theories used relevant to the current situation?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

3. Do the subjects contribute to the strength of the programme?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

4. Does the proposed programme cover all relevant subjects?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

 If no, please indicate other additional areas (courses) that need to be covered by the programme?

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5. Is there any course that is not relevant in the programme?

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| --- | --- |
|  | Yes |

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| --- | --- |
|  | No |

 If yes, what are the courses that need to be omitted / deleted?

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6. State whether the programme fulfills these criteria:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Fully | Partially | None | Remark(if any) |
| a. | Probability and frequency of failure |

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| b. | Life-cycle management |

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| c. | Maintainability |

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| d. | Safety and risk assessment |

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| e. | Reliability design |

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| f. | Market / Industry relevant |

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7. Is this programme sufficient in term of

|  |  |
| --- | --- |
|  | Yes |

 a. Length of study

|  |  |
| --- | --- |
|  | No |

If no, please suggest the appropriate length of study duration. Please explain your suggestion.

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|  |  |
| --- | --- |
|  | Yes |

b. Total number of Reliability

Engineering related courses

|  |  |
| --- | --- |
|  | No |

If no, please suggest the appropriate total number of 3-credit courses for the programme. Please explain your suggestion.

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8. Please suggest additional courses (if any) that would benefit your organization.

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PART II : CAREER OPPORTUNITIES / DEVELOPMENT**

a. Do you think that graduates of this programme are suitable to work in your organisation? If yes, please indicate the areas.

e.g. i. Front End Engineering Design

 ii. Asset Reliability/Integrity/Management

 ii. Risk Assessment

 iii. Design Modification and Integrity Assessment

 v. Others (Please specify)

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. Please indicate relevant jobs for the graduate of this programme in your organisation.

e.g. i. Design Engineer

 ii. Asset Reliability/Integrity Engineer

 ii. Asset Manager

 iii. Reliability/Risk Assessment Engineer

 iv. Others (Please specify)

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. State the number of posts in your organisation that can be filled by graduates of this programme.

|  |  |
| --- | --- |
|  | 1 – 3 posts |

|  |  |
| --- | --- |
|  | 4 – 6 posts |

|  |  |
| --- | --- |
|  | 7 – 9 posts |

|  |  |
| --- | --- |
|  | Others.(Please specify) : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

 d. What is the appropriate income for graduates of this programme?

|  |  |
| --- | --- |
|  | Less than RM 3,000.00 |

|  |  |
| --- | --- |
|  | RM 3,001.00 – 4,000.00 |

|  |  |
| --- | --- |
|  | RM 4,001.00 – 5,000.00 |

|  |  |
| --- | --- |
|  | RM 5,001.00 – 6,000.00 |

|  |  |
| --- | --- |
|  | Others. Please specify : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

e. Do you think that graduates of this programme will enhance their technical knowledge and help them in term of career development?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

**PART III : OTHERS**

 **1. Sponsorship**

 a. Has your organization sponsored any students in this field / area?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

 b. Would you encourage your staff to undergo this course?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

 If no, please state the reason (s)

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 **2. Outcome of the Programme**

a. In your opinion, will this programme be able to produce the right graduates for the labour market?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

If yes, please elaborate.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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If no, please elaborate.

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 b. Is this programme suitable to be enhanced to a higher level?

|  |  |
| --- | --- |
|  | Yes |

|  |  |
| --- | --- |
|  | No |

 If yes, please tick the appropriate level (s)

|  |  |
| --- | --- |
|  | Doctorate Level |