Dear Students,

According to the Masters and Doctoral Standards (Amendment II, March 2015) issued by the Malaysian Qualifications Agency (MQA), it is mandatory for Higher Education Providers (PPT) / Pemberi Pendidikan Tinggi (PPT) to ensure that candidates pursuing Masters or PhD degrees do so inclusive of research methodology courses at their respective universities.

Please note that the MQA does not specify the credit requirements for each research program. Each faculty is responsible for ensuring that their postgraduate candidates take this obligatory Research Methodology course(s) as shown below.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>COURSE</th>
<th>STATUS (Any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters &amp; PhD</td>
<td>Research Methodology</td>
<td>Compulsory (YW)</td>
</tr>
<tr>
<td></td>
<td>Or</td>
<td>Elective (ELF)</td>
</tr>
<tr>
<td></td>
<td>Any Research Method course or related courses -- modular or systematic -- organized by the faculty and in accordance with LO and PO courses.</td>
<td>Audit (AU)</td>
</tr>
</tbody>
</table>

*Students who have already taken the Research Methodology or related courses are eligible for exemption*
To ensure that you meet this graduation requirement, **ALL MASTERS AND PHD STUDENTS (3rd & 4th Semester only) ARE REQUIRED TO ATTEND BOTH THE RESEARCH METHODOLOGY COURSES SUMMARIZED BELOW.**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>SPEAKER</th>
<th>DATE &amp; TIME</th>
<th>REGISTRATION</th>
<th>VENUE</th>
</tr>
</thead>
</table>
| Introduction to Qualitative Research | Assoc. Prof. Datin Dr. Mardziah Hayati Abdullah | 23 May 2016 9.00am – 6.00pm | [http://goo.gl/forms/d24M1xqEV4](http://goo.gl/forms/d24M1xqEV4) | Master’s Students  
Auditorium, Faculty of Engineering, UPM |
|                               |                                              | 26 May 2016 9.00am – 6.00pm | [http://goo.gl/forms/gi4HyR2NRn](http://goo.gl/forms/gi4HyR2NRn) | Phd Students |
| Introduction to Quantitative Research | Prof. Dr. Mohd Majid Konting                   | 24 May 2016 9.00am – 6.00pm | [http://goo.gl/forms/FnejtakIHr](http://goo.gl/forms/FnejtakIHr) | Master’s Students  
Auditorium, Faculty of Engineering, UPM |
|                               |                                              | 25 May 2016 9.00am – 6.00pm | [http://goo.gl/forms/kXvt0lVmLt](http://goo.gl/forms/kXvt0lVmLt) | PhD Students |

The full details are as follows:

**QUANTITATIVE RESEARCH METHODOLOGY**

This workshop will focus on the design of a quantitative research project; beginning with the problem formulation, project design, data collection, and data analysis. The workshop will review the basic analytical techniques and commonly used statistical models for data analysis. Participants will have an opportunity to discuss actual research problems relating to quantitative methodology and data analysis in hard sciences and social research.

**LEARNING OUTCOMES**

**Participants will able to:**

- explain the nature and purpose of Quantitative research
- determine appropriate data collection and analysis methods for Quantitative research in a particular area of study
## WORKSHOP SCHEDULE

### INTRODUCTION TO QUANTITATIVE RESEARCH (Prof. Dr. Mohd Majid Konting)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 24 May 2016 & 25 May 2016 | 0900 – 1030 | 1       | • Introduction to Quantitative Research  
                • Why quantitative research?  
                • Identifying research problem and statement  
                • Aligning problem statement, objectives, hypothesis and/or questions |
|            | 1030 - 1045|         | Morning break                                                         |
| 1045 - 1245|            | 2       | • Quantitative Research Designs and Methods  
                • Experiment, causal-comparative, correlation, and survey designs  
                • Instrumentation and measurement  
                • Sampling and sample size  
                • Data collection                                 |
| 1245 – 1430|            |         | Noon Break                                                            |
| 1430 – 1700|            | 3       | • Quantitative Data Analysis  
                • Descriptive and inferential statistical analysis  
                • Comparative analysis  
                • Correlation analysis  
                • Multivariate analysis  
                ▪ Factor analysis  
                ▪ Cluster analysis  
                ▪ Discriminant analysis  
                ▪ Multiple regression  
                ▪ Canonical analysis  
                ▪ Path analysis  
                ▪ Structural equation modelling (SEM) |
|            | 1700 - 1800 |         | Assessment (MCQ)                                                      |

### QUALITATIVE RESEARCH

Qualitative research typically helps us to understand and explain social phenomena or social aspects of a research concern, such as perspectives, behaviour and events, by exploring and investigating them and the contexts within which they occur. This session introduces participants to the basics and essentials of qualitative research, covering the nature and purpose of the qualitative approach, types of qualitative research such as ethnography, phenomenology, grounded theory and critical research, as well as methods employed in collecting and analysing qualitative data, ethical concerns, issues of reliability and validity, and the scope of applicability.

### LEARNING OUTCOMES

Participants will be able to:
- explain the nature and purpose of qualitative research
- determine appropriate data collection and analysis methods for qualitative research in a particular area of study
# WORKSHOP SCHEDULE
**INTRODUCTION TO QUALITATIVE RESEARCH** (Prof. Madya Datin Dr. Mardziah Hayati Abdullah)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 23 May 2016 & 26 May 2016 | 0900 – 1015 | 1 | Introduction to Qualitative Research  
- The qualitative research paradigm: epistemological assumptions, nature of naturalistic and interpretive inquiry, role of researcher, subjectivity  
- Purposes of qualitative research  
- Types of qualitative research |
|               | 1015 - 1030 |         | Morning break                                                                                   |
|               | 1030 - 1245 | 2      | Designing a Qualitative Study  
- Determining the research problem and research questions  
- Sampling and site access  
- Data collection methods and sources: observations, interviews, documents and artifacts, conversations  
- Triangulation and “thick” description |
|               | 1245 - 1400 |         | Lunch break                                                                                     |
|               | 1400 – 1630 | 3      | Qualitative Data Analysis  
- Inductive and comparative analysis  
- Coding: open and axial coding  
- Constructing and naming categories, identifying themes  
- Making assertions and petite generalisations |
|               | 1630 – 1730 |         | Assessment (MCQ)  
*Kindly bring along 2B pencil for the MCQ assessment* |

For further inquiries, please call 03-89464219 / 4211

Thank you