

<b>Module Title</b> <b>Science Of Management</b>  <b>Keywords</b> Deming's System Of Profound Knowledge, Systems Thinking, Theory Of Knowledge, Statistical Process Control, Psychology	Reference	EN4800
	SCQF	SCQF
	Level	10
	SCQF Points	15
	ECTS Points	7.5
	Created	May 2002
	Approved	March 2004
	Amended	September 2012
	Version No.	2

## This Version is No Longer Current

The latest version of this module is available [here](#)

### Prerequisites for Module

None.

### Corequisite Modules

None.

### Precluded Modules

None.

### Aims of Module

To provide the student with the ability to evaluate the scientific basis of management ideas and techniques, particularly in relation to the use of statistics and the teaching of W. Edwards Deming.

### Learning Outcomes for

### Indicative Student Workload

	Full Time	Part Time
<i>Contact Hours</i>		
Assessment (supervised)	3	3
Lectures/Tutorials	36	36
Other Assessment	0	0
<i>Directed Study</i>		
	21	21
<i>Private Study</i>		
	90	90

### Mode of Delivery

THIS is a lecture-based course supplemented with tutorial and student-centred learning.

### Assessment Plan

Learning Outcomes Assessed
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## Module

On completion of this module, students are expected to be able to:

1. Identify the theoretical basis of current management thinking and the need for a scientific approach to management theory.
2. Discuss, evaluate and assess the contribution of W. Edwards Deming's System of Profound Knowledge to the future development of management thinking.
3. Apply an understanding of variation and statistical process control techniques to the improvement of processes.

### Indicative Module Content

Introduction to the theories that underpin current management thinking. The need for change in thinking rather than techniques. The work of W Edwards Deming. The System of Profound Knowledge: Systems thinking, some knowledge of psychology and variation, theory of knowledge. The need to continually learn. Deming's 14 points. Study of statistical techniques: Introduction to Taguchi experiments, sampling regimes, run charting

Component 1	1,2,3
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Component 1 is a closed book exam covering all learning outcomes. (100% weighting)

### Indicative Bibliography

1. DEMING, W. E., 1996. The New Economics. 2nd ed. Cambridge: MIT Press.
2. NEAVE, H., 1998. The Deming Dimension, Knoxville:SPC Press.

and SPC. Identification of process improvement strategies.