

*How do you inspire, innovate  
and educate?*



**INSPIRE**  
*Many people have gone further than they imagined they could  
because somebody else thought they could.*



# CONTINUING ENGINEERING EDUCATION



*Director Continuing Engineering Education Center*



# Outline

- Why Continuing Engineering Education
- Models from other countries
- Models from Pakistan
- Continuing Engineering Education Center at UET



# Why Continuing Engineering Education

**Only Change is Constant**

Any time  
Any Place  
Any Thing



Nano Tech  
Bio Tech  
Fuel Cells



Aging population  
New digital generation

Jobs of the Future  
Leadership Skills  
Interpersonal Skills

# Registration of Engineers: PEC

B.E. from Accredited  
Engineering Programmes  
(1<sup>st</sup> Schedule, PEC Act 1976)



Registered Engineer, RE

5 Years Work  
Experience +  
CPD +  
PE Exam

Professional Engineer, PE

CPD for  
Renewal of  
Registration  
every 3 years

**Lifelong Engineering Career**

# Gazette of Pakistan , Dec 31, 2008

Effective **July 10, 2010**

- Existing PEs will have to earn 3 Credit Points of CPD every year
- Fresh REs will have to earn 3 to 4 Credit Points per year and accumulate 17 Points in 5 years before giving Engineering Professional Exam
- 1 Credit Point = 1 day short course
- 0.5 Credit Point = 2 hour lecture/ seminar

# Professional Development Activities for Engineering Faculties in India

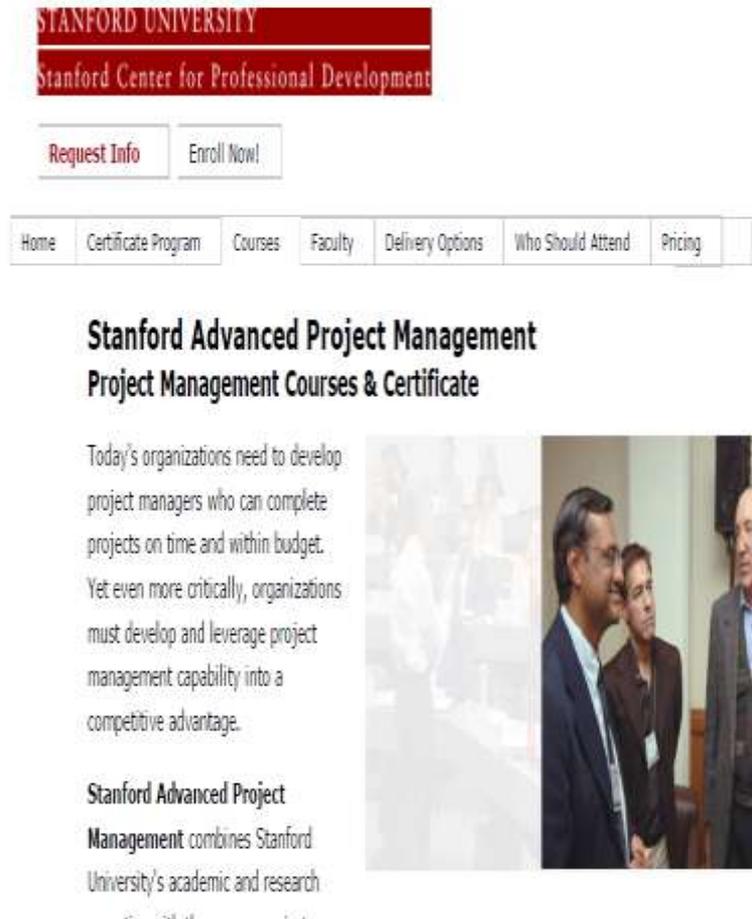
## Desired Outcome:

1. Ability to engage effectively in the global economy
2. Development of indigenous capacity to ensure effective utilization of international aid
3. Promote quality of teaching
4. Promote quality of research
5. Improving project management and financial management skills



# Continuing Engineering Education in USA

- Adapt to changing needs of the clientele
- Have an effective decision making and communication strategy
- Benefit from Certification requirements



**STANFORD UNIVERSITY**  
Stanford Center for Professional Development

[Request Info](#) [Enroll Now!](#)

[Home](#) [Certificate Program](#) [Courses](#) [Faculty](#) [Delivery Options](#) [Who Should Attend](#) [Pricing](#)

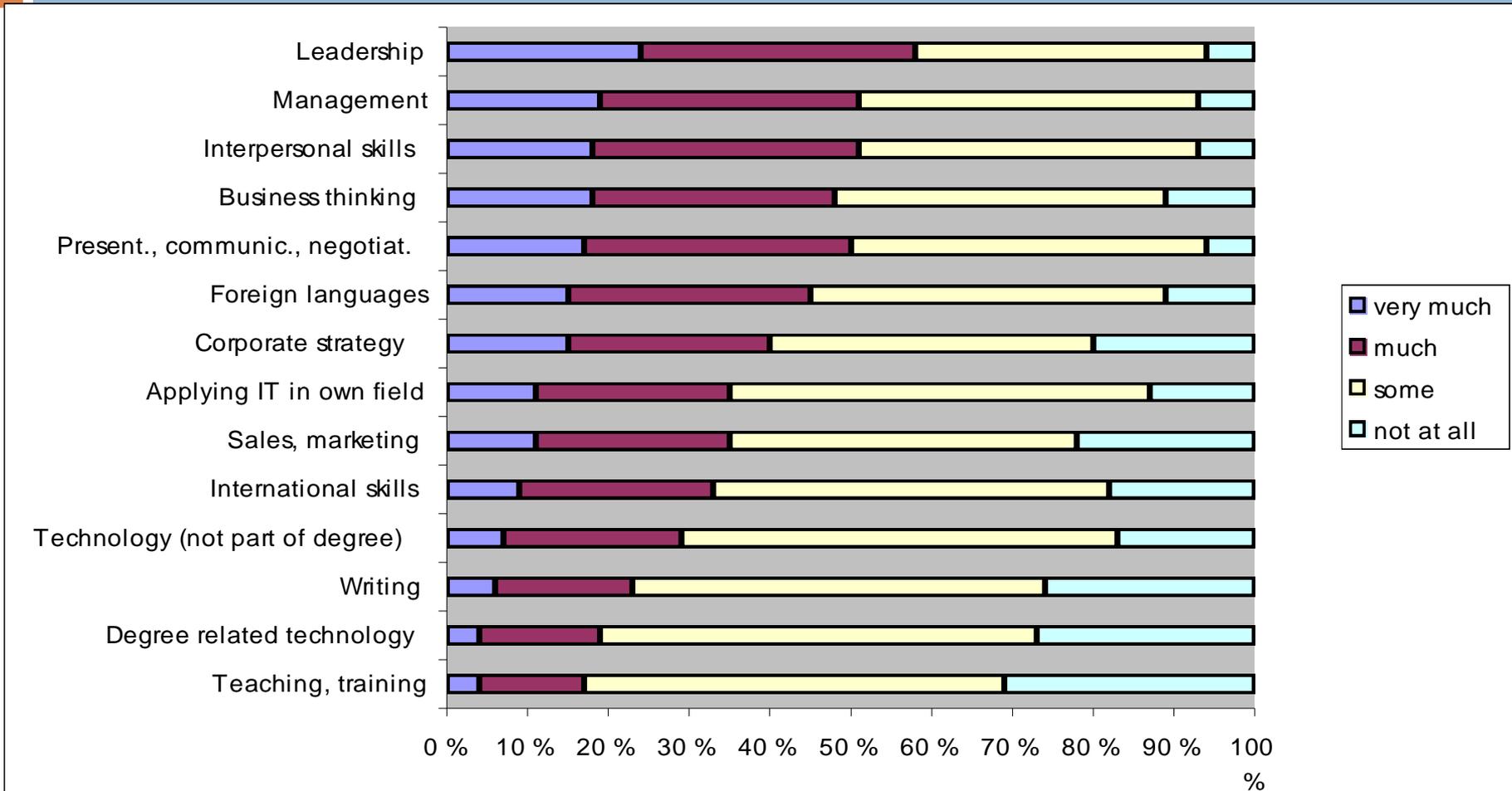
## Stanford Advanced Project Management Project Management Courses & Certificate

Today's organizations need to develop project managers who can complete projects on time and within budget. Yet even more critically, organizations must develop and leverage project management capability into a competitive advantage.

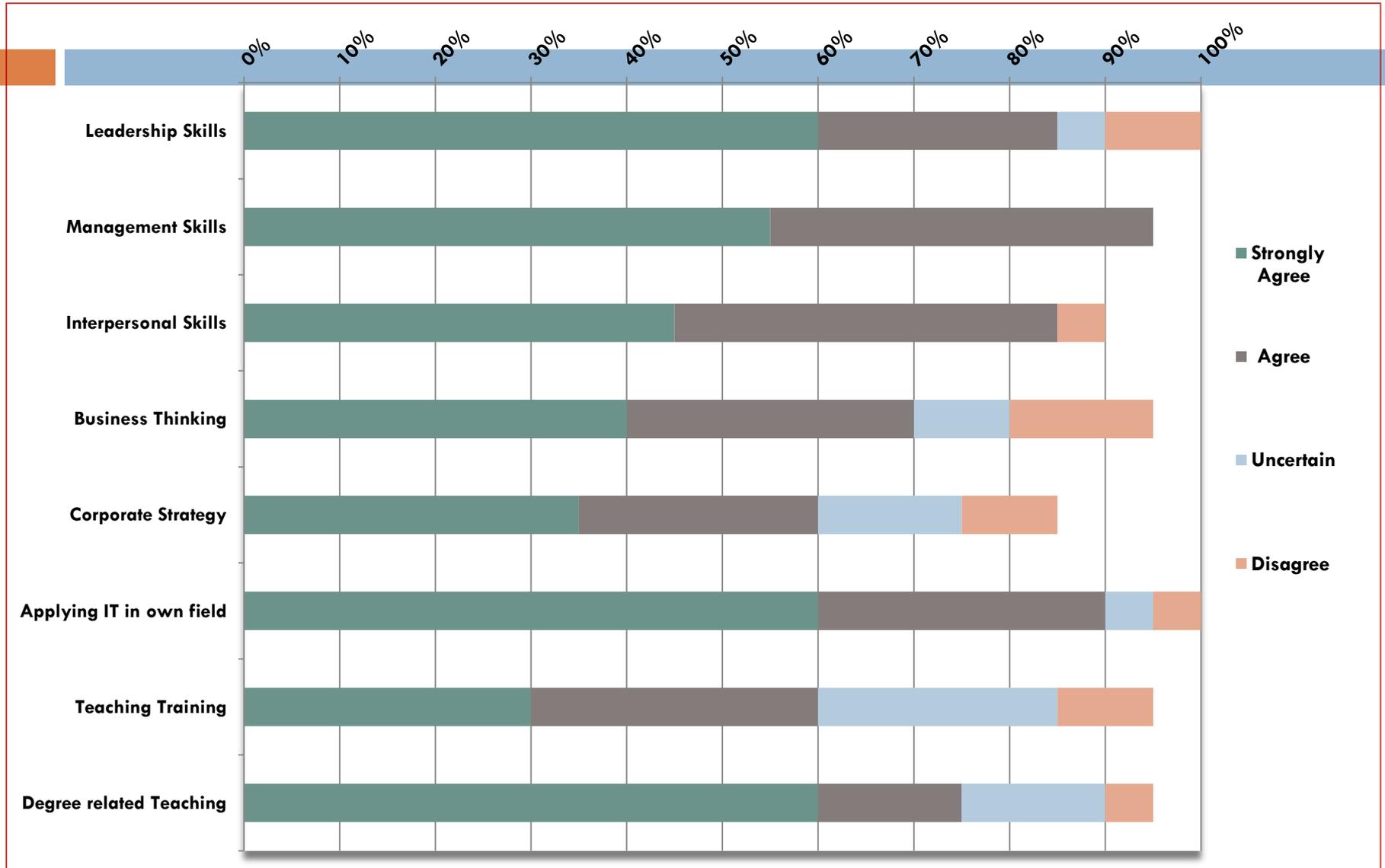
**Stanford Advanced Project Management** combines Stanford University's academic and research



# Learning Needs of Finnish Engineers



# Learning Needs of Faculty



# NUST Professional Development Center



## Professional Development Centre

National University of Sciences and Technology

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### Introduction

National University of Sciences and Technology (NUST) has always been an innovator in responding to the latest market needs. In line with this approach NUST established a "Professional Development Centre (PDC)" in July 2008 through Higher Education Commission (HEC) supported initiative. [More...](#)

### Vision

"To emerge as a respected centre of continuing education at the national level".

### Mission

"To Impart high quality, practical utility continuing education to working professionals in the fields of engineering, public health, and management, and information technology"

### Goal & Objective

To enable working professionals remain updated with the latest developments in their related disciplines thus enhancing their knowledge, employability, and managerial skills. These objectives are achieved through short courses, workshops, and seminars. PDC programmes cover following disciplines:

- [Engineering Sciences](#)
- [Healthcare & Medical Sciences](#)
- [Management & Social Sciences](#)
- [Information Technology](#)



Integrated Management System

### Upcoming Events

#### [Professional Diploma in HRM](#)

##### [Offered at Rawalpindi](#)

- 1- [Basic Level](#)
- 2- [Advance Level](#)

-- [Registration Opened](#) --

[New](#) [Click here for more Details](#)

#### [Professional Diploma in "Occupational Health, Safety and Environment"](#)

-- [Registration Opened](#) --

[New](#) [Click here for more Details](#)

# NED – Center for Continuing Engineering Education

2 year “Conversion Course” for B.Tech (Pass)

“Postgraduate Certificate Courses”(PGC), offered at Master’s level for PEC registered Engineers.

Advanced Project Management

Corrosion Protection Management

Financial Management for Engineers

Mastering Microsoft Project

Certified Quality Professional

Total Quality Management

# Continuing Engineering Education Center at UET



- Build linkages with engineering communities to address their training needs
- Need assessment survey
- Preparation Course for Engineering Professional Exam
- Short Courses and Seminars
- Member International Association of Continuing Engineering Education (IACEE)



Student Project: Automated Blood Pressure Monitor, using SensorDAQ, Gas Pressure Sensor and The Digital Control Unit

# Courses Conducted

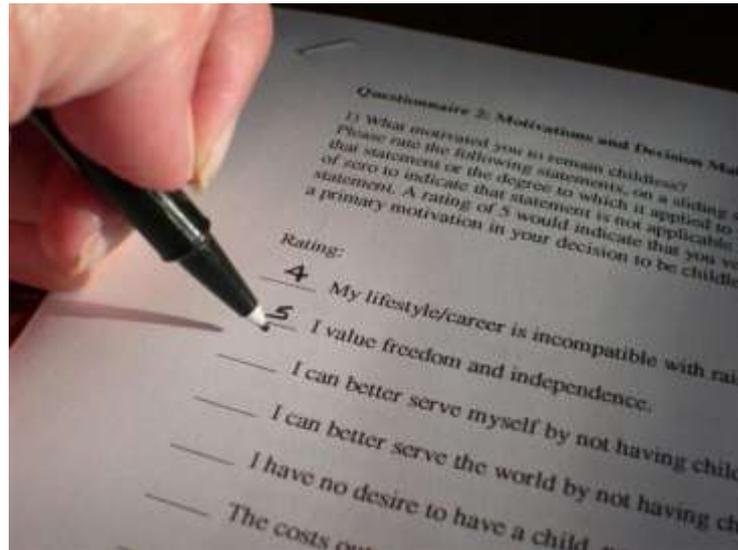
S. No.	Name of Course	Duration	Participants
1	Construction Project Management	3 days	17
2	Constructing Project Management	5 days	16
3	Developing Effective Planning Commission Reports	5 days	18
4	Introduction to Computer Aided Building Design	5 days	16
5	Project Cycle Management	4 days	18
6	Programming in MATLAB	2 weeks	11
7	Interfacing 8051 Microcontroller: Simulation & Implementation	6 weeks	20
8	Occupational Health & Safety in Industries & Process Design	1 day	45
9	Students Grading System	1 day	66
10	Nano Technology for Engineers	1 day	31

# Need Assessment Survey

got a  
minute?



Take our  
Survey!





# Questions ?

