

**Management & Leadership for  
Engineering and Technical Professionals  
Certificate Program**



## OVERVIEW

Technically competent engineering and information technologies professionals face new challenges when they move into management positions. They need to address people issues involving their staffs (and people in other departments within their organizations), business issues in understanding their department's role in the context of organizational business goals and strategies, and leadership issues in staff motivation and extending influence throughout an organization. Some people seem to have innate skills in handling management challenges, but most of us need to acquire these skills gradually and systematically by working with a senior-level mentor, accumulating experience over time, or by studying the tools and techniques of management more formally. The Specialized Studies Program in Management and Leadership for Engineering and Technical Professionals will provide precisely the knowledge and skills that technical people need to become effective managers.

Students who complete this program will be better-equipped to handle interpersonal issues, address departmental matters both operationally and strategically, improve their staff members' motivation, and ensure that their departments' activities are in alignment with their organizations' goals.

## WHO SHOULD ENROLL

This program is designed for people who have solid technical skills in a field such as engineering or information technology and have either been promoted recently to a management role or wish to prepare themselves for such a transition.

## SPECIALIZED STUDIES AWARD REQUIREMENTS

Students must complete six courses from the list below in order to qualify for the Management and Leadership for Engineering and Technical Professionals Specialized Studies Award. For the project management course requirement, students may choose either MGMT X474.8, Project Management of IT, which is tailored for people working in the IT field, or MGMT X442.28, Introduction to Project Management Principles and Practices, which provides a more general treatment of project management concepts applicable to a broader audience.

## PROGRAM BENEFITS

- Provide leadership and direction for your department
- Communicate effectively with subordinates, peers, and upper management
- Address human resources (HR) issues and recruit top technical talent
- Develop effective budgets for a technical department
- Manage small-scale technical projects
- Manage vendors, the procurement process, and outsourced service providers

## PROGRAM FEES

Individual course fees along with the cost of textbooks, parking, and other supplementary materials are subject to change without notice. For budgeting purposes, you may use the following estimates:

Course fees	\$2,250
Candidacy Fee	\$35
Textbooks	\$400
Parking (\$34 per quarter)	\$136
Total Estimated Cost	\$2,821

## LIST OF COURSES

Catalog Number	Title	Units
MGMT X451.14	Situational Leadership for Technical Managers	1.0
MGMT X451.13	Effective Communications for Technical Managers	1.0
MGMT X451.11	Human Resources for Technical Managers	2.0
MGMT X451.12	Budgeting and Finance for Technical Managers	1.5
Choose ONE of the following two courses:		
MGMT X474.8	Project Management of Information Technologies	2.0
MGMT X442.28	Introduction to Project Management Principles and Practices	2.5
MGMT X481.92	Technical Vendor Management: Purchasing, Procurement, and Outsourcing	1.5

For the latest schedule, please visit our Web site: <http://unex.uci.edu/certificates/it/management/courses.asp> or send an email to Stefano M. Stefan at [smstefan@uci.edu](mailto:smstefan@uci.edu) requesting a schedule update for this program.

## COURSE DESCRIPTIONS

### Situational Leadership for Technical Managers MGMT X451.14 (1.0 Units)

A leader who practices effective situational leadership can readily adapt his or her leadership style to a variety of contexts or circumstances and achieve maximum effectiveness. This course builds upon the work of Ken Blanchard and Paul Hersey in which a leader analyzes the needs of a given situation and adjusts his or her style appropriately. There are two types of leadership behaviors: “supportive behavior” and “directive behavior,” which can be broken down into four categories: supporting, coaching, delegating, and directing. You’ll explore these leadership categories and develop a strategy for dealing with a wide variety of people that encourages you to match their “leadership development levels” and realize a higher degree of team effectiveness.

### Effective Communications for Technical Managers MGMT X451.13 (1.0 Units)

Effective communicators know their audiences’ needs and expectations at the outset. This course helps you polish your communications skills and tailor your content and style appropriately for different audiences. You’ll learn how to be effective with technical staff members, who need clear, concise, and detailed instructions so they can perform their work in a manner that meets your expectations, and with “higher” management personnel, who need to understand the impact of your work on the company’s goals and objectives. The course also covers the use of graphical elements to underscore your message as well as presentation styles that can help you achieve maximum impact.

### Human Resources for Technical Managers MGMT X451.11 (2.0 Units)

Gain the skills and knowledge needed to recruit and retain top talent for technical positions including IT and engineering. As a technical manager, it’s often up to you to find the best people for your organization and, once they begin working for you, to keep them motivated. Your company’s human resources department plays a key role, of course, but you need to know precisely the skill set you’re seeking when

recruiting for technical staff positions and you need to know how to inspire and motivate those employees once they are on the job. You’ll learn how to: 1) identify top talent and determine appropriate compensation for that talent; 2) select staff members that will work together cohesively and effectively on team projects; 3) resolve disagreements and conflicts among your staff members; and 4) delegate responsibilities and tasks effectively to your staff members. The course also covers basic laws that affect recruiting and hiring processes.

### Budgeting and Finance for Technical Managers MGMT X451.12 (1.5 Units)

Learn how to develop budgets and manage your department’s financial affairs. Developing a budget is really an opportunity to create an effective and comprehensive plan for the future. You’ll learn how to evaluate your department’s future needs for personnel and resources, and how to capture those needs in terms of financial requirements. You’ll also learn how to view budgets from an organizational perspective and how your department’s individual budget fits into the bigger picture. You’ll explore financial statements, annual reports, and other financial documents.

### Project Management of Information Technologies I&CSCI X474.8 (2.0 Units)

Large engineering or software projects are usually conducted within the framework of a well-defined project management process that helps insure their success. However, a number of technical projects are deemed too small to warrant a full project management treatment. This course shows you how even small- to medium-sized projects can benefit from the principles of project management. Topics include requirements definition and use-case analysis, performance metrics, risk determination and mitigation, task identification, scheduling, verification and testing, and version control.

### Introduction to Project Management Principles and Practices MGMT X442.28 (2.0 Units)

Businesses use project management to manage projects and achieve outcomes typically with limited resources and under limited time constraints. This intensive, hands-on course provides an overview of the principles that underlie project management and covers the fundamental skills needed to enhance the outcome of any project. Gain a working knowledge of the nine major areas of the Project Management Body of Knowledge (PMBOK as defined by the Project Management Institute) including human resources management, communications management, scope management, quality management, scheduling/time

management, cost and resource management, risk management, contract/procurement management, and project integration.

Technical Vendor Management: Purchasing,  
Procurement, and Outsourcing  
MGMT X481.92 (1.5 Units)

An important part of a technical manager's job involves purchasing equipment and services from outside vendors, evaluating and recommending software for company use, and outsourcing tasks and functions. This course helps you deal with these responsibilities. You'll learn how to apply financial considerations to your decision-making as well as how to elicit specific technical requirements from your internal clients to ensure that their needs are met effectively. You'll also learn how to differentiate between projects that you should carry out in-house and those that you should outsource, and how to manage those external resources. Finally, the course addresses special considerations for dealing with international vendors.

## Online Format FAQs

### **What is an online course?**

An online course utilizes the Internet and a web browser as a means of creating a learning environment outside of the traditional classroom. The lectures and discussions will take place on a Distance Learning Center Web site. You will be able to access your course lectures (text based) and communicate with your classmates and instructors through the use of a discussion forum (message board). The online courses follow a classroom structure of covering a lesson a week. You can access your course Web site anytime of the day and place where you have access to the Internet.

### **Who can take online courses?**

Anyone can take an online course as long as they have access to a computer with Internet capabilities, have an active email account and have a basic understanding of how a computer works. An online student also has to be motivated to participate in discussion forums and regularly check the Web site and keep up with the course work.

### **What happens if I fall behind or complete the course early?**

It is okay to be a week ahead or behind. You must remember that participation is a very important aspect of your final evaluated grade for the course. Active participation requires you to post and respond to your instructor and fellow classmates' comments on the discussion forum. If you are too far behind, posting to an old topic will be revisiting something that the majority of your classmates might have discussed.

### **Are there specific dates that I need to log on to the Web site?**

There is a set beginning and end date for your online course. It is suggested that you logon at least 3 times a week to check the discussion forums, to read over assignments and lectures. This is the "asynchronous" aspect of the course.

There might be occasion when the instructor will set a chat time ("synchronous") where he/she assigns a specific date and time for all the students to try to meet in the chat room to ask questions.

All assignments, quizzes, exams, and projects must be completed within the time frame of the course. The instructor will set individual due dates for your assignments, projects and tests.

### **How many hours a week do I have to devote to my online course?**

Just like a classroom course, to get the most out of any type of learning you must commit a certain amount of time to complete the course. You will most likely spend approximately 10 hours a week going over class lectures, doing assignments and spending time on the discussion forum. Time required for each course will vary.

### **Will I be able to see my online instructor or communicate with him/her via telephone?**

Unless there is an extreme instance, all communications with your instructor will be done either through email, the discussion forums or the chat sessions. Please do not expect your instructor to telephone you.

### **How do I communicate with my instructor?**

You communicate with your instructor by either email, discussion forums, or chat sessions. Students are highly encouraged to use these modes of communications, as faxed or mailed assignments are not accepted.

### **What happens if I have trouble accessing the URL with my login and password?**

Contact the Distance Learning Center (DLC) office at [unex-online@uci.edu](mailto:unex-online@uci.edu) or 949-824-7613 and we will assess and work to fix any problems in the most expeditious manner. In order to better serve you, please note the problem as it occurred.

### **Will having a firewall at home or at work prevent me from working on my online course?**

Although, this very seldom occurs, your firewall may prevent you from posting to the discussion forum while allowing you to read the lectures and other resources.

### **Do I need to have cookies enabled?**

Yes, it is necessary to have your cookies enabled. To best protect your computer it is suggested that you vary your cookie options to ensure the most secure level.

**Can I access my course from anywhere?**

You can access the course anywhere that you have Internet access. Some companies have firewalls that prevent you from participating in the chat sessions. Please check with your company before you attempt to access the course.

**I have enrolled and I entered my key, but it still won't let me in.**

Many of you will have enrolled prior to the course start date. Courses will not appear until the course start date. Please note that the first week is considered an orientation week where you can become familiar with the course tools. Always make sure to enter a category for the current quarter that you are signed up for. Many times, previous quarters will be available for past students.

**When is the last day to drop the course?**

The last day to drop a course follows the standard provided in the UCI Extension catalog. There will be an administrative fee assessed for any withdrawals within the allowable period. Please refer to the Extension website at <http://unex.uci.edu/services/registration/drops> for more information.

**What happens if I can't finish a course?**

We understand that certain situations can occur. Please refer to the UCI Extension catalog for procedures, etc.

**How do I know which online courses can take the place of classroom courses?**

Please visit our website at <http://unex.uci.edu> for more information about our certificate programs and course offerings.

**How do online courses work?**

Once you begin your course, you will find that with the use of the course tools, you will be able to navigate from the lecture to the discussion forums or to the weekly outline. You will be able to maneuver through the Web site to post/read assignments and to download/upload files from your instructor. Your instructor will primarily be contacting you by email or through the discussion forum. Once you begin your course, you will find that with your instructor's help, you will find the benefits of taking a course online.

Help files are found on the Distance Learning Center website with instructions on accessing your online course with information about tools use.

**Do I need to purchase books or any additional items?**

Some courses do require that you purchase books or software. Please contact the UCI Bookstore for more information about the books for your courses at (949) 824-7810.

**What happens after I sign up for a course, how do I get started?**

If you enroll through the Web site at <http://unex.uci.edu> you will receive a confirmation email from our Student Services office with information regarding the steps needed to create your login and password, URL to access your course, and the enrollment key to enter your course.

If you have faxed or telephoned your enrollment, you will receive by U.S. mail a confirmation of your course enrollment. On that confirmation you will find the information regarding access to your online course.

**I signed up for this quarter's term and I can't find my online course!**

Your online course will not be available until the actual course start date. The first week of the course is an orientation week, you will have this time to review the syllabus and become familiar with the course tools.

**What is an enrollment key?**

An enrollment key is required only for the first time that you enter your online course. Your enrollment key will be given at the same time as the information regarding your course access.

**Will the platform for online courses be changing continually every quarter?**

There will be changes periodically. Changes occur mainly as a result of student and instructor feedback to our Web site. This is done to maximize the tools.

**Is my online course an instructor led course?**

Like a traditional course, your online course has an instructor that will conduct the course by giving assignments, answering questions, leading discussions and assigning grades.

**Can I get a degree online?**

At this time, you can only receive a Master's Degree in Criminology, Law and Society.

Students intending to transfer UC Irvine Extension course credit for a degree at another college or university should verify acceptance of the course with that institution.

**What kind of grade options do I have?**

The grading options are exactly the same as that of classroom courses.

**Who do I contact if I am having problems with the instructor?**

Please contact the DLC office at (949) 824-7613 or unex-online@uci.edu. Your instructor should be very explicit on the course syllabus or welcome message as to their availability. If the instructor is going out of town or will be away from the computer for an extended period of time, he/she must notify the class.

**Why do I get emails of the discussion forum postings?**

If you are receiving emails from the discussion forums, you are subscribed to that particular forum. You can change this option by going to the forums sections on the left side of the course site under Activities. By selecting forum, you will be able to see all the forums created and to turn on/off the subscription function. There may be a forum that you will not be able to change. More than likely, that will be a place where the instructor will post announcements.

**I like getting the forum subscribed emails, but the responses I made are not on the course Web site.**

If you prefer to receive the subscribed emails from the forum, please do not reply to the email directly, but post your reply to the specific forum where the posting originated. This will ensure that others, including your instructor, will see your reply or comment.

**I am confused and frustrated, I can't seem to find my way around the Web site. What can I do?**

Call us at (949) 824-7613. We will be happy to walk you through the tools and show you everything you need to know.

**UNIVERSITY OF CALIFORNIA, IRVINE**  
**UNIVERSITY EXTENSION**

**APPLICATION FOR CANDIDACY**

**Certificate Program in Management & Leadership for Engineering and Technical Professionals**

This form must be submitted, along with a filing fee of \$125, prior to completion of the third course in the Program.

NAME  Mr.  Mrs.  Ms.

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HOME ADDRESS

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CITY

STATE

ZIP

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PHONE: DAY

EVENING

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SOCIAL SECURITY NUMBER

---

JOB TITLE

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EMPLOYER

---

EMPLOYER ADDRESS

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***Payment must be included with application.***

MY CHECK FOR \$125 IS ENCLOSED (Payable to Regents of University of California).  
CANDIDACY FEE IS NONREFUNDABLE AND NONTRANSFERABLE.

CHARGE TO:       VISA       MASTERCARD       AMERICAN EXPRESS

ACCOUNT NUMBER

EXP DATE

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AUTHORIZED SIGNATURE

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***Mail To:***

UNIVERSITY OF CALIFORNIA, IRVINE  
UNIVERSITY EXTENSION  
PO Box 6050, IRVINE, CA 92616-6050

OR FAX TO:  
(949) 824-2090

*Revised 5/30/07*

## SUMMER 2007 COURSE SCHEDULE

### **Budgeting and Finance for Technical Managers**

#### **MGMT X451.12 (1.5)**

Instructor: John P. Lafare, M.B.A.  
When: Tuesdays, July 10-August 7  
Where: Rooms 166-167, University Extension Building H, UCI Campus  
Fee: \$545  
Reg #: 00213