

1.800.NAT.UNIV
www.nu.edu

School of Engineering and Technology

The University of Values



Convenient Locations

One Course Per Month

Evening Classes

On-Campus and Online

Open Enrollment

Computer Science | Construction Engineering Technology | Information Technology Management | Engineering Management
Wireless Communications | Information Systems | Environmental Engineering | Systems Engineering



The University of Values

TAKE THE FIRST STEP TODAY

School of Engineering and Technology

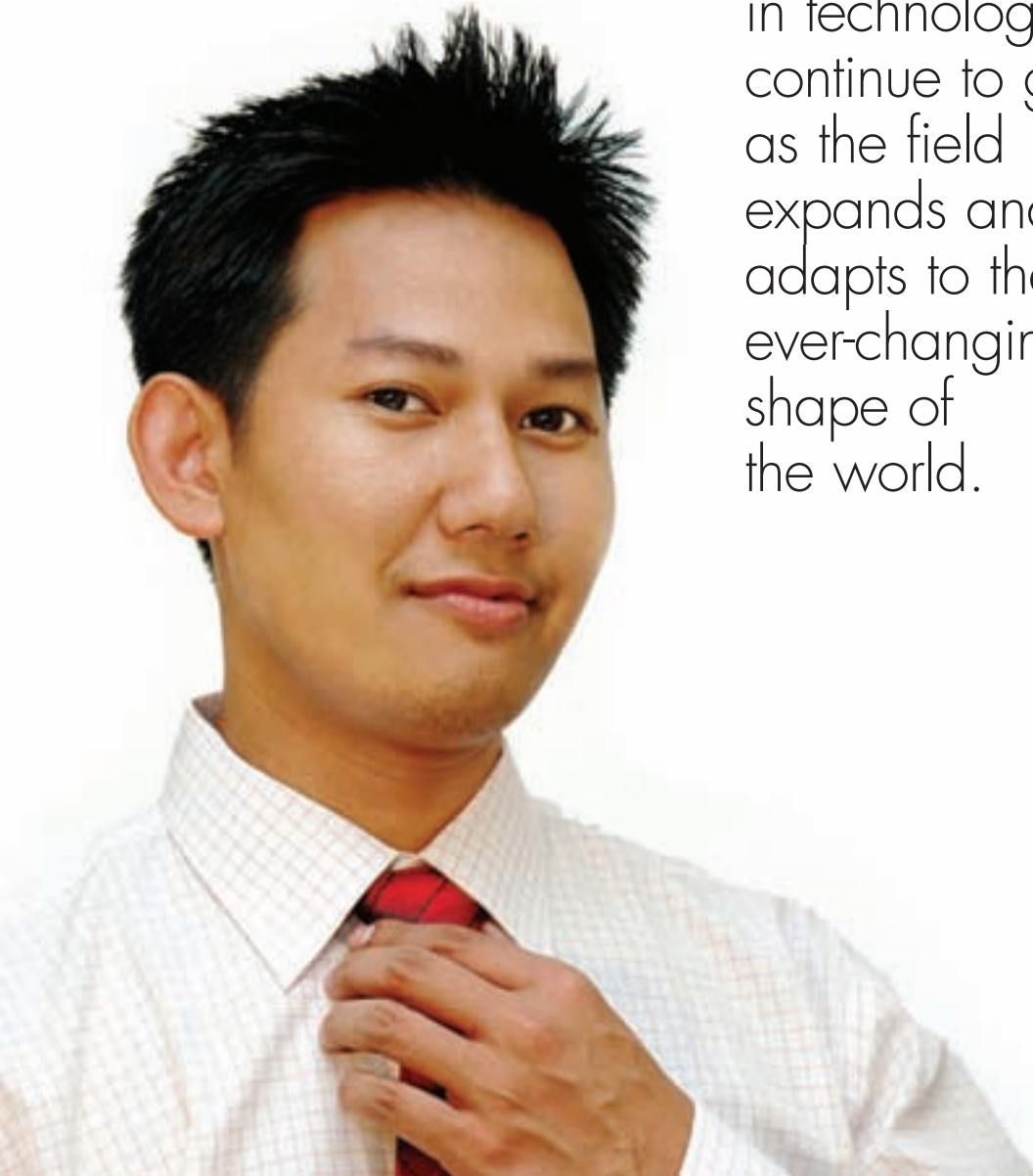
1.800.NAT.UNIV • www.nu.edu

Prepare today for tomorrow's technology

▶ Career opportunities in technology continue to grow as the field expands and adapts to the ever-changing shape of the world.

▶ Technology plays a large role in our everyday lives, and as organizations continue to adopt increasingly sophisticated technologies, those with technical expertise will have many more career options available to them. According to the Bureau of Labor Statistics, information technology managers, computer scientists, database administrators, systems analysts, and software engineers are expected to be among the pace-setters for job growth through at least 2014.

The area of homeland security and safety is also experiencing exponential growth as private and public sector organizations in the U.S. and abroad recognize the need for modern security in a changing world. Along with the seemingly limitless number of job opportunities, other areas of engineering like wireless communications are also booming. Use of wireless technologies and devices by individuals and businesses continues to expand rapidly, resulting in the need for qualified wireless communications engineers.



The School of Engineering and Technology offers a variety of current, onsite and online programs that will prepare you for tomorrow's technology-driven workforce.

The School of Engineering and Technology

Students learn best when hands-on learning meets theory, and the School of Engineering and Technology strives to achieve this objective in all of its programs.

Hands-on learning using state-of-the-art tools and online training simulations are critical to technology and engineering students, so the School incorporates these facets into its diverse programs. Students are exposed to new software applications as well as current technologies.

Our faculty members not only hold graduate degrees from reputable institutions, they also bring years of industry experience into the classroom from organizations such as Northrop Grumman, IBM, and Qualcomm. This means that students gain real-world knowledge backed by sound theory that is applicable now and for years to come.

Undergraduate Programs ▶





Bachelor of Science in Computer Science

Degree requirements include courses in object-oriented programming, data structures and algorithms, operating systems, computer communication networks, software engineering, and computer architecture, as well as mathematics, statistics, and the natural sciences. Computer science degrees remain in consistently strong demand, and offer a variety of exciting options, including software development, programming languages, algorithm design, robotics, and artificial intelligence, to name just a few. This degree opens employment doors in industry, government, commerce, and education.

Bachelor of Science in Construction

The Bachelor of Science in Construction provides you with a well-rounded general education in preparation for coursework that will prepare you for various careers in the construction industry. Complete this program and you will be qualified for positions including assistant project manager, project manager, project coordinator, junior cost estimator, quality and safety controller, and CAD drafter. Graduates with experience, interest and/or knowledge about specific construction trades will be able to fill management and administrative

positions in trades such as carpentry, excavation, concrete work, plumbing, structural steel, cabinetry, roofing, flooring insulation, drywall, electrical, HVAC, and landscaping.

Bachelor of Science in Construction Engineering Technology

In this program, you will get a well-rounded education in construction principles and practices in preparation for a career in the construction industry. The degree prepares students for careers such as construction superintendent, field engineer, project manager, project coordinator, facilities engineer, cost

estimator, CAD drafter, and quality and safety controller. Additionally, graduates of this program with experience, interest, and/or knowledge about specific construction trades, will be capable of performing in a large number of positions within those respective subcontracting firms.

Bachelor of Science in Construction Management

This degree program prepares the student for careers such as construction executive, project manager, project engineer/coordinator, field engineer, planning engineer, cost engineer, cost estimator, quality and safety controller, construction superintendent, CAD drafter, and facilities engineer. Graduates with experience, interest, and/or knowledge about specific construction trades will be capable of performing in a large number of management and administrative positions within respective subcontracting companies, including trades such as carpentry, excavation, concrete work, plumbing, structural steel, cabinetry, roofing, insulation, drywall, electrical, HVAC, and landscaping.

Bachelor of Science in Information Systems

This degree is for those students who seek to gain specialized knowledge in the field of information systems. There is great demand in the corporate world (including non-profit organizations) for people who can integrate all elements of the enterprise into a comprehensive network of responsive, proactive information delivery systems.

Information systems have become increasingly important in industries such as manufacturing, retail, finance, and healthcare.

Course study includes data communications, systems analysis, system development, database administration, project management, computer forensics, health information management, and quality/information assurance.

Bachelor of Science in Information Technology Management

There is an increasing demand for technology expertise in consulting, marketing and sales support, customer services and support, information and library science, and general management.

This degree prepares the graduate to understand basic information technology management concepts and practical technology skills.

Challenging courses combine class lectures, case studies, and hands-on exercises with individual and team projects and presentations, helping students prepare for industry standard certificates in wireless administration and security and/or CISSP management and security.

Graduates are prepared for positions in information desktop management and administration, database management systems development, administration and support, and network management and support.

Bachelor of Science in Manufacturing Design Engineering

Pursue this degree to get the theoretical foundations, hands-on experience, and teaming skills required for effective conceptual, logistical, developmental, and interdisciplinary design of complex engineering devices, product life cycles, and engineering systems through



You will gain real-world knowledge based on sound theory that is applicable now and for years to come.

integration of state-of-the-art computer-aided tools, concurrent engineering standards, and simulation modeling techniques. Students completing this degree will be prepared to hold positions such as manufacturing system design engineer, design supervisor for engineering projects, and product design engineer.

Graduate Programs ▶

According to the Bureau of Labor Statistics, computer scientists, database administrators, systems analysts, and software engineers are expected to be among the pace-setters for job growth through at least 2014.

Master of Science in Computer Science



Learn the aspects of solving complex computing problems while developing essential communication skills. Graduates of this program also learn “people skills,” ethics, and standards of professionalism.

An understanding of computational models and logical discussions of problem solving skills are acquired in this degree program.

Graduates are positioned to become highly productive members of real world computing teams.



Master of Science in Database Administration

Provides students with a solid foundation in the fundamental skills of database theory, modeling, implementation, administration, and management. It is a specialized professional degree designed for chief information officers (CIO), database administrators, software engineers, web application developers, and other business and technology professionals seeking skills in creating and managing critically important enterprise data and information. Graduates will have the skills to develop the database technologies and innovations fostering an organization's success.

Master of Science in Engineering Management



This degree is designed to bring the benefits of technology to engineers, scientists, and technologists interested in furthering their skills in engineering management. Specializations offer practical business perspectives necessary for engineering management. Unlike traditional MBA programs, this program combines management skills with the student's technical background and experience. Unique management concepts and technical knowledge prepare graduates to direct technical organizations in today's increasingly competitive business world.

Master of Science in Environmental Engineering

Environmental engineers are responsible for safe drinking water, treating and disposing of wastes, maintaining air quality, controlling water pollution, and remediating contaminated sites. They develop new and improved means to protect the environment, and are employed by many industries: engineering consulting firms; industries that need to comply with pollution emission and discharge regulation; private and municipal agencies that supply drinking water and treat and dispose of waste; government agencies that monitor and regulate waste discharges and air

The area of homeland security and safety is experiencing exponential growth in the private and public sectors in the U.S. and abroad.

emissions; laboratories; universities that conduct environmental research; international agencies that transfer knowledge to developing countries; and public-interest groups that advocate environmental protection.

Master of Science in Homeland Security and Safety Engineering

This master's degree represents an interdisciplinary area that brings together fields of engineering, science, and management from the most traditional to the most technologically advanced and novel. The curriculum emphasizes the fundamentals and practices that define the theory and effective practice of asset and

people protection, and provides the focus for the Homeland Security and Safety Engineering degree. The program is designed so that students who successfully complete it are academically trained to appear for Certified Safety Professional (CSP) certification administered by the Board of Certified Safety Professionals, for the American Society of Industrial Security (ASIS) Certified Protection Professional (CPP) exam, and for several FEMA certifications.

Master of Science in Information Systems

This is designed to provide students with the requisite management, business, strategic, and technical skills needed to help them apply information systems technology efficiently and effectively. The program's objective is to provide education and career development foundations, including: oral, written, and presentation skills; technical skills; people and business skills; and ethics and professionalism, which are integrated throughout its individual courses. The curriculum is designed as a set of interrelated building blocks consisting of foundations, core, integration, and career tracks.

Master of Science in Software Engineering

Software engineering is a discipline that encompasses the tools, processes, methods, and techniques to develop and maintain quality software. This program provides professional education in systems and software development using state-of-the-art design and development methods in compliance with standards set by the IEEE, the Department of Defense, and the Software Engineering Institute at Carnegie Mellon University.

Graduates are prepared to become pioneers, leaders, and practitioners in software engineering, software architecture, computer system engineering, computer-based media, common object-oriented engineering, and database design. They may hold positions in software project management, software development, database management systems, and software quality assurance.

Master of Science in Systems Engineering

The concept of systems and general systems theory has become relevant to scientists, engineers, industry, and society. It continues to be more complex with advances in applied science, such as mobile communications, global positioning systems, and bioengineering, to name a few.

Looking forward, this environment calls for an understanding of how these technologies affect society so that their design and implementation provide efficient, effective, and quality outcomes with no unintended consequences.

Knowledge related to the lifecycle of systems, including definition, development, deployment, and decommission is learned in this program.

Master of Science in Technology Management

This professional degree integrates technology concepts with organizational workflow needs, preparing individuals to manage and lead the technology transfer to any organization in any industry. Over the past decade the synergy of business, technology, and people has created opportunities in all fields of technology management, especially in information technology. Organizations rely on the understanding of information technology, coupled with management knowledge and superior leadership practices, to compete in the technology-driven business world. Managers must continuously build upon a set of core technological competencies over their career due to the rapid changes being experienced in the technological sectors of organizations.

This program consists of a set of challenging courses combining lectures, case studies, hands-on exercises, individual and team projects and presentations.

Master of Science in Wireless Communications

A professional degree that integrates communication techniques, problem solving strategies, simulation skills, and mathematical foundations with the hands-on training required to solve real world problems in telecommunications.

This program uses a distinctive and challenging curriculum that emphasizes multidisciplinary knowledge and integrates theory through applications and design concepts. Classes combine lectures, case and hands-on studies, individual and team projects, research papers, and participant presentations.

It is designed for professionals and managers who need to facilitate the learning and application of skills in the field of wireless communications.

Undergraduate Degrees

Bachelor of Science in Computer Science
Bachelor of Science in Construction
Bachelor of Science in Construction Engineering
Technology**
Bachelor of Science in Construction Management**
Bachelor of Science in Manufacturing Design
Engineering
Bachelor of Science in Information Systems
Bachelor of Science in Information Technology
Management*

Graduate Degrees

Master of Science in Computer Science*
Master of Science in Database Administration
Master of Science in Engineering Management*
Master of Science in Environmental Engineering
Master of Science in Homeland Security and Safety
Engineering*
Master of Science in Information Systems*
Master of Science in Software Engineering*
Master of Science in Systems Engineering
Master of Science in Technology Management*
Master of Science in Wireless Communications

Certificate Programs

Construction Contract Administration
Construction Documents Technology
Construction Management
Construction Safety and Inspection
Construction Specifications
Electrical Systems Cost Estimating
Information Technology Management
Mechanical Systems Cost Estimating
Graduate Certificate in Industrial Engineering
Graduate Certificate in Lean Six Sigma
Graduate Certificate in Project Management
Graduate Certificate in Security and Safety
Engineering
Graduate Certificate in Supply Chain Management
and e-Logistics

* Denotes program also offered 100% online.

** Denotes program has on-site prerequisites.

Note: Consult an admissions advisor for online course availability. Not all courses or programs listed in this brochure are available at every campus.

Take the first step!

Admission to National University is simple. To speak with your own personal advisor, call us today at **1.800.NAT.UNIV**, or visit our website at **www.nu.edu** to apply online.

National University

You decide where to go. We'll help you get there.

Going to school is a big decision, and you don't need complicated admission processes to slow you down. At National University, we've simplified entry because we know our students demand accessibility. Our evening-focused, accelerated format means earning your bachelor's or master's degree won't interfere with your personal or professional obligations.

National University makes attending your classes simple while maintaining high quality degree offerings. National infuses quality into all of its programs, from business to information technology to psychology and education. Our curriculum combines concept, theory, and application so that what you learn in the classroom is relevant to the workplace.

We award more master's degrees to Hispanics and African Americans than any other higher learning institution in California.





Our Reputation Speaks for Itself ▶

National University is the second-largest, nonprofit, private institution of higher learning in California. National provides more master's degrees in education to minority students than any other college or university in California. Annually, National University also ranks in the Top 10 nationally in granting master's degrees to women.

Earn Your Degree on Your Schedule

Because National has 28 campuses throughout California including one in Nevada, there's probably a location near your work or home. And since National offers many of its credentials and degrees online, your education goes where you go.

The mace, a symbol of National University, is inscribed with the Latin motto, *discendo vivimus* — "we live through learning."

At National University, classes are small. With an average class size of 20 students, you get the one-on-one faculty interaction you deserve.

As a nonprofit institution, National University invests in its students by providing them with superior faculty, cutting edge technology and library resources.

The University is:

Accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC)
Approved by the Commission on Teacher Credentialing (CTC)
Approved by the Commission on Collegiate Nursing Education (CCNE)
Accredited by the International Assembly for Collegiate Business Education (IACBE)
A member of the American Association of Colleges for Teacher Education (AACTE)
A member of the Council of Colleges of Arts and Sciences (CCAS)

National University's English Language Programs are accredited by the American Association of Intensive English Programs (AAIEP)



National University possesses one of the largest e-Book collections in the United States. It is accessible 24 hours a day, seven days a week through the library's home page at www.nu.edu/library.

Learning Resources at Your Fingertips

National University provides you with modern technology in its classrooms, onsite labs, and beyond. You can access your current grades, class schedules, and financial aid information from your online student portal. The National University Library System offers numerous services to help you complete your coursework and contains one of the largest e-book collections in the U.S.

The University of Values

National University is dedicated to educational access and academic excellence, and provides challenging and



relevant programs that are learner-centered, success-oriented, and responsive to technology. National University is anchored by the core values of quality, access, relevance, accelerated pace, affordability, and community.

A History of Lifelong Learning

Since 1971, National University has been dedicated to making lifelong learning opportunities accessible, challenging, and relevant to a diverse student population. National's academic and administrative headquarters are located in La Jolla, California.

Funding Your Education

National University's financial aid advisors can help you navigate the financial aid process so you can find a way to pay for school. Funding may also be available in the form of state and federal grants, scholarships, loans or tuition reimbursement.

CHANGE YOUR FUTURE!

Call our toll-free number and a personal advisor will help you meet your individual educational goals. Call **1.800.NAT.UNIV** or visit **www.nu.edu** for details or to apply online.

SAN DIEGO COUNTY

National University System
Administrative Headquarters
11355 North Torrey Pines Road
La Jolla, CA 92037-1013
(858) 642-8000

National University
Academic Headquarters
11255 North Torrey Pines Road
La Jolla, CA 92037-1011
(858) 642-8800

National University Library at
Spectrum Business Park
9393 Lightwave Avenue
San Diego, CA 92123-1447
(858) 541-7900

Spectrum Business Park Campus
9388 Lightwave Avenue
San Diego, CA 92123-1426
(858) 541-7700

Technology & Health Sciences Center
3678 Aero Court
San Diego, CA 92123-1788
(858) 309-3400

South Bay Campus
660 Bay Boulevard, Suite 110
Chula Vista, CA 91910-5200
(619) 563-7400

La Mesa Campus
7787 Alvarado Road
La Mesa, CA 91941-3643
(619) 337-7500

Carlsbad Campus
705 Palomar Airport Road, Suite 150
Carlsbad, CA 92009-1029
(760) 268-1500

Rancho Bernardo Campus
16875 West Bernardo Drive, Suite 150
San Diego, CA 92127-1675
(858) 521-3900

Military Learning Centers

Marine Corps Air Station
Miramar Learning Center
Building 5305
San Diego, CA 92145
(619) 563-7355

Naval Air Station North Island
Learning Center
Building 650
San Diego, CA 92135-7024
(619) 563-7478

Naval Base San Diego
Learning Center
Building 151
San Diego, CA 92136-5000
(619) 563-7474

Fleet AntiSubmarine Warfare Training
Learning Center
Building 7
San Diego, CA 92147-5090
(619) 563-7488

Naval Base Coronado
Learning Center
Building 650
San Diego, CA 92135-7024
(619) 563-7478

Marine Corps Recruit Depot
Learning Center
Building 111
San Diego, CA 92140-5000
(619) 563-7482

Naval Submarine Base
Admissions Office
140 Sylvester Road, Building 140
San Diego, CA 92106-3521
(619) 563-7490

Naval Hospital Admissions Office
Building 26, Room 3B9BS
San Diego, CA 92134-5000
(619) 563-7470

Marine Corps Base Camp Pendleton
Learning Center
Building 1331
Camp Pendleton, CA 92055-5020
(760) 268-1533

Twentynine Palms Learning Center
Marine Air Ground Task Force
Training Center
Building 1526, P.O. Box 6051
Twentynine Palms, CA 92278-1118
(760) 830-6887

Naval Base Bremerton
Admissions Office
2255 Cole Avenue
Building 853, Room 106
Bremerton, WA 98314
(360) 476-8428

SAN BERNARDINO COUNTY

San Bernardino Campus
804 East Brier Drive
San Bernardino, CA 92408-2815
(909) 806-3300

Ontario Campus
3800 E Concaours, Suite 150
Ontario, CA 91764-5904
(909) 919-7600

LOS ANGELES COUNTY

Los Angeles Campus
5245 Pacific Concourse Drive, Suite 100
Los Angeles, CA 90045-6905
(310) 662-2000

Sherman Oaks Campus
14724 Ventura Boulevard, Suite 801
Sherman Oaks, CA 91403-3501
(818) 817-2460

VENTURA COUNTY

Camarillo Campus
761 East Daily Drive, Suite 120
Camarillo, CA 93010-0767
(805) 437-3000

ORANGE COUNTY

Orange Campus
765 The City Drive South, Suite 207
Orange, CA 92868-4942
(714) 429-5300

Costa Mesa Campus
3390 Harbor Boulevard
Costa Mesa, CA 92626-1502
(714) 429-5100

KERN COUNTY

Bakersfield Campus
4560 California Avenue, Suite 300
Bakersfield, CA 93309-1150
(661) 864-2360

FRESNO COUNTY

Fresno Campus
20 River Park Place West
Fresno, CA 93720-1551
(559) 256-4900

SANTA CLARA COUNTY

San Jose Campus
3031 Tisch Way, 100 Plaza East
San Jose, CA 95128-2541
(408) 236-1100

SAN JOAQUIN COUNTY

Stockton Campus
3520 Brookside Road
Stockton, CA 95219-2319
(209) 475-1400

SACRAMENTO COUNTY

Sacramento Campus
9320 Tech Center Drive
Sacramento, CA 95826-2558
(916) 855-4100

SHASTA COUNTY

Redding Campus
2195 Larkspur Lane, Suite 200
Redding, CA 96002-0629
(530) 226-4000

Nevada

Henderson, Nevada Campus
2850 West Horizon Ridge Parkway,
Suite 301
Henderson, NV 89052-4395
(702) 531-7800

ONLINE INFORMATION CENTERS

Temecula Online Information Center
40705 Winchester Road, Suite 5
Temecula, CA 92591-5516
(951) 296-1220

West Covina Online Information Center
2498 Plaza Drive
West Covina, CA 91790
(626) 939-1600

Sacramento Online Information Center
5911 Sunrise Mall
Citrus Heights, CA 95610-6901
(916) 855-4340

Summerlin Online Information Center
10870 West Charleston Boulevard,
Suite 180
Las Vegas, NV 89135-1171
(702) 531-7850

Call Toll-free
1-800-NAT-UNIV
(628-8648)

or Current Students Call
1-866-NU-ACCESS
(682-2237)

Student Concierge
Services
1-866-628-8988
scs@nu.edu

Visit our website
www.nu.edu

Learn about National
University Online
(619) 563-7285
www.nu.edu/online

Visit our Library
www.nu.edu/library

National University System Affiliates

National University

Division of Pre-College
Programs

National Polytechnic
College of Science

National University
International

Spectrum Pacific Learning
Company LLC

WestMed College



2009