

# Graduate Degrees, Majors, and Certificate Programs

## The University of Tennessee, Knoxville

### 2006-2007 Academic Year/Listed by College and Department

Below is a list of all graduate degree programs offered at the University of Tennessee, Knoxville. A degree or certificate is awarded upon completion of a specified program of study in a major field. Degree titles are posted on transcripts and diplomas. Major titles are posted on transcripts. A formally approved subcomponent of a degree program is a concentration.

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE
<b>College of Agricultural Sciences and Natural Resources</b>			
Agricultural and Extension Education (Program)	Agricultural and Extension Education	MS	Agricultural Education
			Agricultural Extension Education
Agricultural Economics	Agricultural Economics	MS	Agribusiness
			Agricultural Economics
Animal Science	Animal Science	MS	
		PhD	
Biosystems Engineering and Soil Science	Biosystems Engineering	MS	
		PhD	Agricultural Electrical and Electronic Systems
			Agricultural Power and Machinery
			Agricultural Structures and Environment
	Biosystems Engineering Technology	MS	
		Environmental and Soil Sciences	MS
Entomology and Plant Pathology	Entomology and Plant Pathology	MS	Entomology
			Plant Pathology
Food Science and Technology	Food Science and Technology	MS	
		PhD	Food Chemistry
			Food Microbiology
			Food Processing
Forestry, Wildlife and Fisheries	Forestry	MS	
	Natural Resources	PhD	
	Wildlife and Fisheries Science	MS	
Interdepartmental	Plants, Soils, and Insects	PhD	Bioactive Natural Products
			Crop Sciences
			Entomology
			Environmental and Soil Sciences
			Horticulture
			Integrated Pest Management
			Plant Improvement
			Plant Pathology
			Weed Biology
Plant Sciences	Plant Sciences	MS	
<b>College of Architecture and Design</b>			
School of Architecture	Architecture	MArch	Track 1 (for students seeking first professional degree)
			Track 2 (for students with first professional who wish to develop an area of specialization)
<b>College of Arts and Sciences</b>			
Anthropology	Anthropology	MA	Archaeology
			Biological Anthropology
			Cultural Anthropology
			Mediterranean Archaeology
			Zooarchaeology

Graduate Degrees, Majors, and Certificate Programs/The University of Tennessee, Knoxville/2006-2007 Academic Year/Listed by College and Department

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE	
		PhD	Archaeology	
			Biological Anthropology	
			Cultural Anthropology	
			Zooarchaeology	
School of Art	Art	MFA	Ceramics	
			Drawing	
			Graphic Design	
			Media Arts	
			Painting	
			Printmaking	
Audiology and Speech Pathology	Audiology	MA		
		AuD	Aural Habilitation	
	Speech and Hearing Science	PhD		Audiology
				Hearing Science
				Speech and Language Pathology
	Speech Pathology	MA	Aural Habilitation	
Biochemistry and Cellular and Molecular Biology	Biochemistry and Cellular and Molecular Biology	MS		
		PhD		
Chemistry	Chemistry	MS	Analytical Chemistry	
			Environmental Chemistry	
			Inorganic Chemistry	
			Organic Chemistry	
			Physical Chemistry	
			Polymer Chemistry	
		PhD	Analytical Chemistry	
			Chemical Physics (in cooperation with Physics Department)	
			Environmental Chemistry	
			Inorganic Chemistry	
			Organic Chemistry	
			Physical Chemistry	
			Polymer Chemistry	
			Theoretical Chemistry	
Computer Science	Computer Science	MS		
		PhD		
Earth and Planetary Sciences	Geology	MS		
		PhD		
Ecology and Evolutionary Biology	Ecology and Evolutionary Biology	MS	Behavior	
			Ecology	
			Evolutionary Biology	
		PhD	Behavior	
			Ecology	
Evolutionary Biology				
English	English	MA	Writing	
		PhD		
Geography	Geography	MS		
		PhD		
History	History	MA		
		PhD	American History	
			European History	
Interdepartmental/Intercollegiate	Life Sciences	MS	Genome Science and Technology	
			Plant Physiology and Genetics	
		PhD	Genome Science and Technology	
			Plant Physiology and Genetics	

Graduate Degrees, Majors, and Certificate Programs/The University of Tennessee, Knoxville/2006-2007 Academic Year/Listed by College and Department

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE
Interdisciplinary Programs		Graduate Certificate	Linguistics
			Medieval Studies
			Women's Studies
Mathematics	Mathematics	MMath	
		MS	Applied Mathematics
		PhD	Mathematical Ecology/Evolution
Microbiology	Microbiology	MS	
		PhD	
Modern Foreign Languages and Literatures	French	MA	
	German	MA	
	Spanish	MA	
	Modern Foreign Languages	PhD	First Concentration French German Spanish Second Concentration Applied Linguistics French German Italian Portuguese Russian Spanish
School of Music	Music	MMusic	Accompanying
			Choral Conducting
Composition			
Instrumental Conducting			
Jazz			
Music Education			
Music Theory (optional emphasis in Music Technology)			
Musicology			
Pedagogy (Piano or Vocal)			
Performance (Organ, Percussion, Piano, Strings, Voice, or Winds)			
			Graduate Certificate
Philosophy	Philosophy	MA	Religious Studies
		PhD	
Physics and Astronomy	Physics	MS	Astrophysics
			Atomic, Molecular, Optical, and Low Temperature Physics
			Biophysics
			Chemical Physics
			Condensed Matter and Surface Physics
			Elementary Particle Physics
			Geophysics
			Health Physics
			Mathematical and Computational Physics
		Nuclear and Relativistic Heavy Ion Physics	
		Theoretical Physics	
		PhD	Astrophysics
			Atomic, Molecular, Optical, and Low Temperature Physics
			Biophysics
			Chemical Physics
			Condensed Matter and Surface Physics
			Elementary Particle Physics
			Mathematical and Computational Physics
			Nanomaterials
Nuclear and Relativistic Heavy Ion Physics			
Theoretical Physics			

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE
Political Science	Planning	MSP	Environmental Planning
			Land Use Planning
			Public Administration
			Real Estate Development/Economic Development
			Transportation Planning
	Urban Design		
Political Science	Political Science	MA	
		PhD	
Public Administration	Public Administration	MPA	
		Dual JD-MPA program available (with College of Law)	
Psychology	Psychology	MA	Experimental Psychology
			General Psychology
		PhD	Clinical Psychology
			Counseling Psychology
			Experimental Psychology
Sociology	Sociology	MA	Criminology
			Environmental Sociology
			Political Economy
		PhD	Criminology
			Environmental Sociology
			Political Economy
Theatre	Theatre	MFA	Costume Design
			Dramaturgy
			Lighting Design
			Performance
			Scene Design

**College of Business Administration**

Accounting and Information Management	Accounting	MAcc	Audit and Controls
			Taxation
Economics	Economics	MA	
		PhD	
Management	Human Resource Development	MS	
Interdepartmental	Business Administration	MBA	Finance
			Logistics
			Marketing
			Operations Management
			Secondary Concentration
			Innovation and Entrepreneurship
			Executive MBA Programs
			Aerospace Executive MBA
			Physician Executive MBA
			Professional MBA
	Senior Executive MBA		
Dual JD-MBA program available (with College of Law)			
Dual MS-MBA program available (with College of Education, Health, and Human Sciences and College of Engineering)			
PhD		Accounting	
		Finance	
		Human Resource Development	
		Logistics	
		Marketing	
Statistics			
Industrial and Organizational Psychology	PhD		
Statistics, Operations and Management Science	Management Science	MS	
		PhD	
	Statistics	MS	Industrial Statistics
		Graduate Certificate	Applied Statistical Strategies

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE	
<b>College of Communication and Information</b>				
Interdepartmental	Communication and Information	MS	Advertising	
			Communication Studies	
			Journalism and Electronic Media	
		PhD	Public Relations	
			Advertising	
			Communication Studies	
School of Information Sciences	Information Sciences	MS	Information Sciences	
			Journalism and Electronic Media	
			Public Relations	
<b>College of Education, Health, and Human Sciences</b>				
Child and Family Studies	Child and Family Studies	MS	Child and Family Studies	
			Early Childhood Education	
Educational Psychology and Counseling	College Student Personnel	MS		
	Counseling	MS	Mental Health Counseling	
			Rehabilitation Counseling	
			School Counseling	
	Educational Psychology	MS	Adult Education	
	School Counseling	EdS	Applied Educational Psychology	
School Psychology	EdS			
Exercise, Sport, and Leisure Studies	Exercise Science	MS	Biomechanics/Sports Medicine	
			Exercise Physiology	
	Recreation and Leisure Studies	MS	Recreation and Leisure Administration	
			Therapeutic Recreation	
	Sport Studies	MS	Sport Management	
			Sport Studies	
Dual MS-MBA program available (with College of Business Administration)				
Instructional Technology, Health and Educational Studies	Instructional Technology and Educational Studies	MS	Cultural Studies of Educational Foundations	
			Curriculum	
			Instructional Technology	
	Public Health	MPH	Curriculum	
			Instructional Technology	
			Community Health Education	
				Gerontology
				Health Planning/Administration
				Veterinary Public Health
				Dual MS-MPH program available (Nutrition/Public Health)
		Graduate Certificate	Applied Epidemiology	
		Graduate Certificate	Gerontology	
		Graduate Certificate	Public Health Leadership	
Safety		MS	Emergency Management	
			Safety Management	
Interdepartmental	Education	PhD	Counselor Education	
			Cultural Studies of Educational Foundations	
			Curriculum, Educational Research, and Evaluation	
			Educational Psychology	
			Exercise Science	
			Higher Education Administration	
			Instructional Technology	
			Leadership Studies in Education	
			Literacy Studies	
			School Psychology	
			Special Education	
			Sport Studies	
			Teacher Education	
	Human Ecology	PhD	Child and Family Studies	
			Community Health	
	Hospitality and Tourism Management			

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE
Nutrition	Nutrition	MS	Nutrition Science
			Retail and Consumer Sciences
			Nutrition Science
			Public Health Nutrition
			Dual MS-MPH program available (Nutrition/Public Health)
Retail, Hospitality, and Tourism Management	Consumer Services Management	MS	Hospitality and Tourism Management
			Retail and Consumer Sciences
	Graduate Certificate	Services Management	
			Tourism Development
Theory and Practice in Teacher Education	Educational Administration	MS	
		EdS	
	Teacher Education	MS	Track I (previously licensed teachers)
			Art Education
			Early Childhood Special Education
			Education of the Deaf and Hard of Hearing
			Elementary Education
			English Education
			Foreign Language/ESL Education
			Mathematics Education
			Reading Education
			Science Education
			Science Education (Informal Education)
			Social Science Education
			Special Education
			Track II (initial licensure teachers)
			Art Education
			Education of the Deaf and Hard of Hearing
			Elementary Teaching
			Middle Grades Teaching
Modified and Early Childhood Special Education			
Secondary Teaching			
	EdS	Elementary Education	
		English Education	
		Foreign Language/ESL Education	
		Mathematics Education	
		Reading Education	
		Science Education	
		Social Science Education	
		Special Education	
	Graduate Certificate	Urban Education	

### College of Engineering

Chemical Engineering	Chemical Engineering	MS	Advanced Control Systems	
			Chemical Bioengineering	
			Chemical Engineering	
			Polymer Science and Engineering	
		Dual MS-MBA program available (with College of Business Administration)		
		PhD		Advanced Control Systems
Chemical Bioengineering				
			Chemical Engineering	
			Polymer Science and Engineering	
		Graduate Certificate	Maintenance and Reliability Engineering	
Civil and Environmental Engineering	Civil Engineering	MS	Construction Engineering	
			Environmental Engineering	
			Geotechnical/Materials Engineering	
			Public Works Engineering	
			Structural Engineering	
			Transportation Engineering	

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE
		PhD	Construction Engineering
			Environmental Engineering
			Geotechnical/Materials Engineering
			Public Works Engineering
			Structural Engineering
			Transportation Engineering
	Environmental Engineering	MS	Air Quality
			Environmental Risk Assessment
			Mixed Waste Management
			Waste Management
			Water Quality
Electrical and Computer Engineering	Computer Engineering	MS	Computer Architecture
			Computer Networks
			Computer Vision
			Data Fusion
			Data Structures
			Data Visualization
			Embedded Systems
			Image Processing
			Information Systems
			VLSI System Design
	Dual MS-MBA program available (with College of Business Administration)		
		PhD	Computer Architecture
			Computer Networks
			Computer Vision
			Data Fusion
			Data Structures
			Data Visualization
			Embedded Systems
			Image Processing
			Information Systems
			VLSI System Design
Electrical Engineering		MS	Circuit Theory
			Communication Theory
			Computers
			Control Systems
			Electro-Optics
			Electromagnetic Theory
			Plasma Engineering
			Power Electronics
			Power Systems
			Solid-State Electronics
	Dual MS-MBA program available (with College of Business Administration)		
		PhD	Circuit Theory
			Communication Theory
			Computers
			Control Systems
			Electro-Optics
			Electromagnetic Theory
			Plasma Engineering
			Power Electronics
			Power Systems
			Solid-State Electronics
Industrial and Information Engineering	Industrial Engineering	MS	Engineering Management
			Human Factors Engineering
			Information Engineering

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE		
			Manufacturing Systems Engineering		
			Product Development and Manufacturing (Dual MS-MBA only)		
			Traditional Industrial Engineering		
		Dual MS-MBA program available (with College of Business Administration)			
		PhD	Engineering Management		
			Human Factors Engineering		
			Information Engineering		
			Manufacturing Systems Engineering		
		Graduate Certificate			Traditional Industrial Engineering
					Engineering Management
			Maintenance and Reliability Engineering		
Materials Science and Engineering	Materials Science and Engineering	MS	Materials		
			Metallurgy		
			Polymers		
			Textiles		
		Dual MS-MBA program available (with College of Business Administration)			
		PhD	Materials		
			Metallurgy		
			Polymers		
			Textiles		
		Polymer Engineering	MS	Polymer Processing	
Polymer Science					
Textile Science					
PhD	Polymer Processing				
	Polymer Science				
	Textile Science				
Mechanical, Aerospace, and Biomedical Engineering	Aerospace Engineering	MS	Aeroacoustics		
			Aerodynamics and Performance		
			Energy Conversion and Utilization		
			Flight and Aerospace Mechanics		
			Gas Dynamics		
			Heat Transfer and Fluid Mechanics		
			Propulsion		
			Space Engineering (UTSI only)		
			Structures and Stress Analysis		
			Thermodynamics		
		Dual MS-MBA program available (with College of Business Administration)			
		PhD	Aeroacoustics		
			Aerodynamics and Performance		
			Energy Conversion and Utilization		
	Flight and Aerospace Mechanics				
	Gas Dynamics				
	Heat Transfer and Fluid Mechanics				
	Biomedical Engineering	MS	Biofluid Mechanics		
			Bioimaging		
			Biomaterials		
Cell and Tissue Engineering					
Dual MS-MBA program available (with College of Business Administration)					
PhD		Musculoskeletal Biomechanics			
	Biofluid Mechanics				
			Bioimaging		
			Biomaterials		
			Cell and Tissue Engineering		

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE	
	Engineering Science	MS	Musculoskeletal Biomechanics	
			Applied Artificial Intelligence	
			Biomedical Engineering	
			Computational Mechanics	
			Fluid Mechanics	
			Mechanics of Composite Materials	
			Optical Engineering (UTSI only)	
			Product Development and Manufacturing	
			Solid Mechanics	
			Dual MS-MBA program available (with College of Business Administration)	
	PhD	Applied Artificial Intelligence		
		Biomedical Engineering		
		Computational Mechanics		
		Fluid Mechanics		
		Industrial Engineering		
		Mechanics of Composite Materials		
		Optical Engineering (UTSI only)		
		Solid Mechanics		
		Mechanical Engineering	MS	Dynamics, Control, and Robotics
				Energy Conversion and Utilization
Gas Dynamics				
Heat Transfer and Fluid Mechanics				
Machine Design				
Power Generation				
Product Development and Manufacturing				
Propulsion				
Space Engineering (UTSI only)				
Stress Analysis				
Thermodynamics				
Dual MS-MBA program available (with College of Business Administration)				
PhD	Dynamics, Control, and Robotics			
	Energy Conversion and Utilization			
	Gas Dynamics			
	Heat Transfer and Fluid Mechanics			
	Machine Design			
	Power Generation			
	Propulsion			
	Space Engineering (UTSI only)			
	Stress Analysis			
	Thermodynamics			
Graduate Certificate	Computational Fluid Mechanics			
	Maintenance and Reliability Engineering			
Nuclear Engineering	Nuclear Engineering	MS	Radiological Engineering	
		Dual MS-MBA program available (with College of Business Administration)		
	PhD	Radiological Engineering		
		Maintenance and Reliability Engineering		
Graduate Certificate	Nuclear Criticality Safety			
<b>College of Law</b>				
	Law	JD	Advocacy and Dispute Resolution	
			Business Transactions	
		Dual JD-MBA program available (with College of Business Administration)		
Dual JD-MPA program available (with Department of Political Science in the College of Arts and Sciences)				
<b>College of Nursing</b>				
	Nursing	MSN	Adult Health Nursing	
			Family Nurse Practitioner	
			Homeland Security Nursing	

DEPARTMENT	MAJOR	DEGREE	CONCENTRATION AVAILABLE	
			Mental Health Nursing	
			Nurse Anesthesia	
			Nursing Administration	
			Nursing of Women and Children	
			PhD	
			Graduate Certificate	Adult Health Nursing
				Family Nurse Practitioner
				Homeland Security Nursing
				Mental Health Nursing
				Nurse Anesthesia
Nursing Administration				
			Nursing Education	
			Nursing of Women and Children	

### College of Social Work

	Social Work	MSSW	Clinical Social Work Practice
			Social Welfare Management and Community Practice
		PhD	
		Graduate Certificate	Management and Community Practice

### College of Veterinary Medicine

	Veterinary Medicine	DVM	
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### Intercollegiate

	Aviation Systems (Offered only at UT Space Institute, Tullahoma, Tennessee)	MS		
		Comparative and Experimental Medicine	MS	
			PhD	

## GRADUATE DEGREE PROGRAMS

Master of Accountancy	Master of Science in Planning
Master of Architecture	Master of Science in Social Work
Master of Arts	Dual JD-MBA
Master of Business Administration	Dual JD-MPA
Master of Fine Arts	Dual MS-MBA
Master of Mathematics	Dual MS-MPH
Master of Music	Specialist in Education
Master of Public Administration	Doctor of Audiology
Master of Public Health	Doctor of Jurisprudence
Master of Science	Doctor of Philosophy
Master of Science in Nursing	Doctor of Veterinary Medicine

## DEFINITION OF GRADUATE TERMS

**Cognate** – A limited block of courses or hours required outside the unit in which the major is offered.

**Concentration** – A collection of courses within a major that focuses on a particular subject area. The term concentration describes the nature of the set of courses.

**Major** – The principal educational interest of a student as represented by one of the curricula prescribed by the various units at the University of Tennessee, Knoxville. The major specifies the minimum requirements for a degree.

**Minor** – An area of interest secondary to the major that is represented by a specified set of hours and/or courses. Differs from concentration in that a minor is not a subdivision of the major.

**Option** – The means of designating thesis/non-thesis requirements.

**Specialization** – A sub-collection of courses within a concentration that focuses on specific subject matter. The term “specialization” describes the nature of the set of courses.

**Tool** – A limited block of courses or hours required to enhance research or methodological expertise.

**Track** – A separate route leading to the same degree but with different requirements.