and unknown signals, estimation of signal parameters, signal resolution.

7640 Information Theory, Coding, and Cryptography (3)
Prereq.: EE 4660 or equivalent. Measures of information, channel capacity, Shannon and Huffman coding, rate-distortion theory, source coding, cyclic codes, BCH and Golay codes, convolutional codes, problems of data security, probabilistic ciphers, computational complexity ciphers.

7660 Manufacturing, Technology & Society (3)
Prereq.: EE 4660 or equivalent. Sequences of random variables, renewal processes, Markov chains, and queueing models.

7670 Communication Networks (3)
Prereq.: EE 7660. Protocols, performance, and implementation of the data link layer and the network layer of communication networks.

7672 Internetworking Principles (3)
Prereq.: EE 7660. Theory, implementation, and performance analysis of switch architectures and broadband integrated networks; traffic and congestion control.

7674 Wireless Communication Networks (3)

7700 Advanced Topics in Computer Engineering (3)
May be taken for a max. of 12 hrs. of credit when topics vary.

7710 Digital Logic (3)
Prereq.: EE 3750 or equivalent. Mathematical foundations of Boolean algebra; vector switching functions, Boolean differential calculation, and fault detection.

7715 Computer Arithmetic (3)
Prereq.: EE 3755 or equivalent. Number systems; arithmetic algorithms; high performance adders, multipliers, dividers; floating-point arithmetic; residue number systems; hardware implementation.

7720 Advanced Computer Architecture (3)
Prereq.: EE 4720 or equivalent. Computer architecture; vector processing; parallel processing and interconnection networks.

7725 Interconnection Networks (3)
Prereq.: EE 4720 or equivalent. Interconnection network theory, analysis, and implementation; shared memory, coherent caches, and related topics.

7728 Multiprocessor Computer System Design (3)
Prereq.: EE 4720 or equivalent. Symmetric shared memory multiprocessors, distributed shared memory systems, simultaneous multithreading, and chip-multiprocessors.

7730 Image Analysis I (3)
Prereq.: EE 4120 or equivalent. Basic techniques such as image transforms, image coding, image analysis and synthesis, image formation, and image understanding.

7740 Image Analysis II (3)
Prereq.: EE 4660 and 7730. Continuation of EE 7730. Formal mathematical treatment of image segmentation, shape analysis, texture analysis, and scene analysis.

7745 Neural Networks and Iterative Maps (3)
Prereq.: EE 4745 or equivalent. Neural network approach to artificial intelligence; general properties of iterative maps; mapping networks for pattern recognition; optimization; genetic algorithms; implementation issues.

7750 Machine Recognition of Patterns (3)
Prereq.: EE 4660 or equivalent and knowledge of programming lan-
guages. Theory and design of machine vision systems; pattern analysis; design of deterministic, stochastic, and fuzzy classifiers; unsupervised learning; feature selection.

7755 Machine Recognition of Patterns (3)
Prereq.: EE 7555 and EE 3540 or equivalent. Switch level fault models, test generation for combinational and sequential circuits, VLSI testing, design for testability.

7765 Distributed Computing System Reliability (3)
Prereq.: EE 3140 and 4720 or equivalent. Reliability measures, standards, evaluation, and bounds; multimode and statistical dependent failure analysis; distributed and parallel system reliability and availability, graceful degradation, performance modeling, software reliability.

7770 Interworking Principles (3)
Prereq.: EE 4710 or equivalent. Internet computing, networks, and transport layers, IP switching, Routing techniques, Internet security, Firewalls, Intrusion.

7780 Software Design Principles (3)
Prereq.: CSC 3102 or equivalent. Engineering approach to computer software development; structured and modular programming concepts; software design and management; program testing and correctness proofs; diagnostic tools; software measures; other topics as determined by the instructor.

7785 Program Parallelization (3)
F Prereq.: EE 3755 or equivalent. Analysis and optimization of programs for a variety of architectures with respect to an ethnical and/or application domain. Theoretical foundations of parallel and distributed computing; formal models of computers and computations.

7795 Models and Methods for Parallel Computation (3)
Prereq: EE 4740 or consent of instructor. Abstract models of parallel computation; algorithms, complexity, and simula-
tions.

9000 Thesis Research (1-12 per sem.)
Prereq.: permission of department.

9000 Dissertation Research (1-12 per sem.)
Prereq.: permission of department. S/U grading.

ENGINEERING • ENGR

1050 Introduction to Engineering (2)
Prereq.: permission of department.

2050 Undergraduate Seminar (1) For engineering students only. Pass/Fail grading. Topics related to academic, professional, and career development for engineering students. Students will include on-campus representatives, industrial, governmental and consulting professionals, and education experts.

2785 Manufacturing, Technology & Society (3)
Su History and development of manufacturing and technology and its influence on production, society, and environment. Course available only as part of a studio abroad program.

9000 Dissertation Research (1-12 per sem.) S/U grading.

ENGLISH • ENGL

Students who are not exempt will be required to pass one, two, or three English composition courses. Placement level depends on ACT/SAT/AP scores, a placement exam, or prior college work. Placement may be taken progressively. The completion of English 2000 or its equivalent (English 1005 for international students, or approved transfer credit) is required of all students.

The satisfactory completion of English 1001 or equivalent credit is prerequisite for all English courses numbered 2000 and higher.

General education courses are marked with stars (★).

0004 English Composition (5)
For international students whose diagnostic tests indicate the need for intensive basic writing skills. Pass-no credit grading. Not for degree credit. Required during the first semester of residence for all international students (graduates, undergraduates, and transfer students) who are not on the basis of the placement examination required of all international students.

1001 English Composition (3)
Placement by department. Introduction to writing in forms of expressive and informative discourse.

1004 English Composition (3)
Prereq.: ENGL 0004 or placement by department. For international students. Same as ENGL 1000/1001, with emphasis on usage and idiom problems specific to international students. Required during the first semester of residence for all international students (graduates, undergraduates, and transfer students) who are not on the basis of the placement examination required of all international students.

1051 Spoken English for International Graduate Students (3)
Prereq.: ENGL 1000/1001. Writing plays for workshop criticism; practice in both open and closed forms; emphasis on contemporary techniques and prosody.

2008 Introduction to Writing Drama (3) Also offered as THTR 2008. Writing plays: practice in techniques of exposition, characterization, and dramatization.

2009 Introduction to Writing Screenplays (3)
Prereq.: 3 hrs. from ENGL 2024, 2025, 2027, 2029, 2123, 2148, 2001, 2202, 2220, 2231, 2270, 2593, 2673, or 2674. Writing plays for workshops and production; techniques of exposition, characterization, and dramatization.

1202 Business Writing for International Students (3)
Credit will not be given for both this course and ENGL 2824. Skills for reading and writing about literature from a variety of critical perspectives; approaches such as reader response, psychoanalysis, myth, new historicism, and feminism applied to a range of literary works.

2025 Fiction (3)
Skills for reading and writing about fiction; attention to generic conventions and critical perspectives; section emphasis may vary, consult department handbook.

2027 Poetry (3)
Skills for reading and writing about poetry; attention to generic conventions and critical perspectives; section emphasis may vary, consult department handbook.

2029 Drama (3)
Skills for reading and writing about drama; attention to generic conventions and critical perspectives; section emphasis may vary, consult departm ent handbook.

2059 Introduction to Technical Writing (3)
Prereq.: ENGL 2024, 2025, 2027, 2029, 2123, 2148, 2001, 2202, 2220, 2231, 2270, 2593, 2673, or 2674. Writing plays for workshops and production; techniques of exposition, characterization, and dramatization.

2824 Introduction to African American Literature (3)
Credit will not be given for both this course and ENGL 2009. Skills for reading and writing about literature; attention to historical development, context, and critical perspectives; topics such as "The Epic," "Imagining the Family," "Literature and the City," section emphasis will vary, consult department handbook.

2148 Shakespeare (3) The more popular plays.
2173 Louisiana Literature (3) Fiction, poetry, essays, and drama of Louisiana.
2175 The Civil War in Literature (3) Portrayal of the Civil War in fiction, poetry, drama, diaries, and letters.
2201 Introduction to World Literature Traditions (3)
See CPLT 2201.
2206 Introduction to Modern World Literature (3)
See CPLT 2202.
2220 Major British Authors (3)
Selected major British authors and movements (16th to mid-19th century).
2222 African American Literature (3)
Prerequisites: ENGL 2024, 2025, 2027, 2029, 2123, 2148, 2001, 2202, 2220, 2231, 2270, 2593, 2673, or 2674. Writing plays for workshops and production; techniques of exposition, characterization, and dramatization.
2231 Reading Film as Literature (3) Introduction to film as literature; mastery of film language and literary bases; cinematic narrative and drama; film classics.
2270 Major American Authors (3)
Selected major American authors from the Colonial period to the present.
2300 Interpreting Discourse (3) Study of and writing about discourse forms (fiction, popular and critical texts, technical and legal documents), using linguistic, rhetorical, and cultural analysis.
2423 Introduction to Folklore (3) Also offered as ANTH 2423. Folklore genres of the world; sources of folklore; literary, psychological, sociological, anthropological, and historical approaches to folk material; relationships between folklore and written literature.
2593 Images of Women: An Introduction (3) Critical examination of women's representations, addressing a range of traditional and/or popular genres, historical periods, and/or critical approaches; emphasis on developing textual and interpretive skills; section emphasis may vary, consult department handbook.
2673 Literature and Ethnicity (3) Literature of African-American Heritage.
2674 Introduction to African-American Literature (3) Major figures and popular texts of black American literature, including fiction, poetry, drama, films and essays; influence of genre on the articulation of common political and social themes.
2675 Descriptive Grammar of English (3) Examination of what every English speaker has internalized about