

- IE 8990 Special Topics in Industrial Engineering. 1-9 hours
- IE 9000 Research/Dissertation. Hours and credits to be arranged

Industrial Technology

(See Instructional Systems, Leadership, and Workforce Development)

Instructional Systems, Leadership, and Workforce Development

College of Education

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The Department of Instructional Systems, Leadership and Workforce Development offers graduate course work leading to master's degrees in Educational Leadership, Instructional Technology, Technology, Workforce Education Leadership, and a Master of Arts in Teaching in Community College Education. The master's degree programs are offered with a thesis option and require a minimum of 30 semester credit hours and a comprehensive examination. The non-thesis option is also offered. The educational specialist, the doctor of education, and the doctor of philosophy degrees may be earned with a program emphasis in Educational Administration or Technology. The Ph.D. degrees in Community College Leadership and in

Elementary, Middle, and Secondary Education Administration are also available. For more information, contact the Department of Instructional Systems, Leadership and Workforce Development, Box 9730, Mississippi State, MS 39762, telephone 662-325-2281, fax 662-325-7599, or email olinzock@colled.msstate.edu.

Admission Criteria—Prerequisites for admission into the graduate program include all the general requirements of the Office of Graduate Studies. In addition, scores from all sections of the GRE must be submitted. International students must obtain a TOEFL score of 550 or higher.

Program of Study/Completion Requirements – The master's degrees require the following credit hours of course work above the baccalaureate degree for the non-thesis option: Master of Science in Instructional Technology, 33 hours; Master of Science in Technology, 30 hours; Master of Science in Workforce Education Leadership, 33 hours, Master of Science in School Administration, 39 hours, and MAT in Community College Education, 33-36 hours. At least 15 hours must be from 8000-level courses or above, and a minimum of 15 credit hours must be department courses. A written comprehensive examination is required. Students who elect the thesis option must complete an oral comprehensive examination in defense of the thesis.

Educational Specialist students must complete at least 30 semester hours above the Master's degree, and one-half or more of the hours must be 8000 level courses or above. A thesis (six credit hours) or a Directed Individual Study (three credit hours) is required. A final written comprehensive examination is required.

Doctoral students are required to complete a minimum of 90 hours of course work above the baccalaureate degree, at least two-thirds of which must be from 8000 level courses or above. Each student is assigned a major professor and a committee. A formal program of study is developed by the student with the advice and concurrence of the student's major professor and other committee members during the student's second semester of enrollment. Twenty hours of dissertation research, written and oral preliminary examinations, a dissertation, and an oral examination in defense of the dissertation are required.

Provisional Admission—If a student does not fully meet the admission requirements of the program, it may be possible for that student to be admitted provisionally. If admitted provisionally, the student must attain a 3.00 GPA on the first nine hours of graduate courses at Mississippi

State University after admission to the program. Transfer or unclassified graduate credit cannot be used to fulfill this requirement. If a 3.00 GPA is not attained, the student may be dismissed from the graduate program.

Contingent Admission—A student may be given a department-contingent admission. In this case the department will establish requirements the student must meet before regular admission is granted, such as completing specific courses with a grade of B or higher or completing required course work if the student does not have an undergraduate degree in an appropriate area for graduate study in the department.

Academic Performance—Unsatisfactory performance is defined as making more than two grades of C or lower in courses taken for graduate credit or failure to maintain a B average in graduate courses attempted after admission to the program (i.e., program and non-program courses). In addition, failure of the comprehensive/preliminary examination, an unsatisfactory evaluation of a thesis or dissertation, failure of the research defense, or any other failure of a required component of one's program of study is unsatisfactory performance. Any one of these or a combination of these will constitute a basis for review for possible dismissal.

If unsatisfactory performance is determined, the graduate coordinator, the major professor, and the dean will review the student's record and determine a course of action. Appeal of dismissal can be made by submitting a written appeal statement to the graduate coordinator and/or department head. If the dismissal is upheld by the graduate coordinator and/or department head upon the student's appeal, the student can then submit a written appeal to the Dean of the College of Education.

Instructional Systems and Workforce Development

Master of Science in Technology (M.S.T.)

Required Courses:

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|-------------------------------------------------------------------|---------------------------------------------------------------------------|
| EDF 8353 | Principles of Curriculum Development. 3 hours |
| EDF 8363 | Functions and Methods of Research in Education. 3 hours |
| Teacher Education Majors must meet these additional requirements: | |
| TKT 8263 | Philosophy and Administration of Vocational Education. 3 hours |
| TKT 8213 | Content and Method of Teaching in Career and Technical Education. 3 hours |

Master of Science in Instructional Technology (M.S.I.T.)

Prerequisite Courses:

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|-----------------------------------|------------------------------------------|
| TKT 1273 | Microcomputers in Education. 3 hours |
| TKB 6283 | Advanced Office Systems. 3 hours |
| One of the following two courses: | |
| TKB 6543 | Advanced Information Processing. 3 hours |
| TKT 6743 | Presenting with Media. 3 hours |

Required courses:

- | | |
|----------|--------------------------------------------------------------|
| TKT 8703 | Trends and Issues in Instructional Systems. 3 hours |
| TKT 8713 | Seminar in Research and Development. 3 hours |
| TKT 8723 | Instructional Design for Industry. 3 hours |
| TKT 8200 | Internship in Vocational Education and Technology. 1-6 hours |
| TKT 8793 | Directed Project in Instructional Technology. 3 hours |

Master of Science, Workforce Education

Leadership (W.E.L.)—This program is offered jointly through Mississippi State University and Alcorn State University (ASU). Courses offered only at Mississippi State University may be taken by distance education by ASU students; courses offered only at ASU may be taken by distance education by MSU students. Students at either school must take some course work at the other school, usually via distance education techniques.

Required Courses:

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|-----------------------------------------------------------|-----------------------------------------------------------|
| Instructional Technology and Workforce Education. 9 hours | |
| Offered at MSU only: | |
| TKT 8233 | Occupational Surveys, Placement and Follow-up. 3 hours |
| TKT 8272 | Instructional Design for Industry. 2 hours |
| TKT 8763 | Seminar in Planning for Instructional Technology. 3 hours |
| TKT 8773 | Teaching and Training with Media. 3 hours |

Offered at ASU only:

IE 552	School-to-Work Initiatives
IE 578	Welfare-to-Work Programs
IE 579	Federal and State Job Training Programs
IE 589	Vocational Administration Certification Course

Other required courses:

EDF 8363 Functions and Methods of Research in Education. 3 hours

TKT 8203 Internship in Workforce Development. 3 hours

AIS 8523 Teaching Out-of-School Groups. 3 hours

MGT 8513 Human Resource Management. 3 hours

SO 8303 Rural Sociology. 3 hours

MGT 9813 Seminar in Organizational Behavior. 3 hours

CCL 8113 History and Philosophy of the Community College. 3 hours

Educational Specialist Degree-Technology (Ed.S.)—Required courses:

EPY 6114 Educational and Psychological Statistics. 4 hours

TKT 8793 Directed Project in Instructional Technology. 3 hours

TKT 8000 Thesis Research. 6 hours
or
Additional courses selected with approval of the student's graduate committee and the graduate coordinator. Program must include at least 30 credit hours of course work.

**Doctor of Education-Technology (Ed.D)
Required College Core—Minimum of 21 hours:**

EPY 8214 Advanced Educational and Psychological Statistics. 4 hours

EPY 9213 Advanced Analysis in Educational Research. 3 hours

EPY 8223 Psychological Foundations of Education. 3 hours

EDF 9313 Philosophy of Education. 3 hours

EDF 8363 Function and Methods of Research in Education. 3 hours

EDF 9373 Educational Research Design. 3 hours

NOTE: Additional courses selected with approval of the student's graduate committee and the graduate coordinator.

The program also includes an area of emphasis (24-36 hours), minor (12-30 hours), dissertation research (20 hours) and electives (12 hours).

Doctor of Philosophy-Technology Emphasis (Ph.D.)

Required College Core—Minimum of 22 hours:

EPY 8214 Advanced Educational and Psychological Statistics. 4 hours

EPY 9213 Advanced Analysis of Educational Research. 3 hours

EDF 8363 Function and Methods of Research in Education. 3 hours

EDF 9373 Educational Research Design. 3 hours

EDF 9313 Philosophy of Education. 3 hours

EPY 8223 Psychological Foundations of Education. 3 hours

NOTE: Additional courses selected with approval of student's graduate committee and the graduate coordinator.

The program also includes an area of emphasis (24-36 hours), minor (12-18 hours), dissertation research (20 hours) and electives (11-13 hours).

Department Courses—Course prerequisites are noted in parentheses.

Technology:

TKT 6073 Instructional Materials Development and Use in Vocational Education. 3 hours

TKT 6103 Delivery of the Vocational-Technical Instructional Program. 3 hours

TKT 6143 History and Philosophy of Vocational and Technical Education. 3 hours

TKT 6183 Coordination of Part-Time Education. 3 hours

TKT 6213 Teaching Basic Business Subjects. 3 hours

TKT 6223	Management of the Vocational-Technical Learning Environment. 3 hours	TKT 8773	Teaching and Training with Multimedia. 3 hours
TKT 6233	Design of the Vocational-Technical Instructional Program. 3 hours	TKT 8793	Directed Project in Instructional Technology. 3 hours
TKT 6253	Evaluation and Measurement of Students in Vocational Education And Technology. 3 hours	TKT 8803	Design and Evaluation of Instructional Software (TKT 1273). 3 hours
TKT 6713	Authoring for Instruction (TKT 1273 or consent of instructor). 3 hours	TKT 8813	Issues in Distance Education. 3 hours
TKT 6733	Managing a Multimedia Learning Environment. 3 hours	TKT 8833	Design and Implementation of Data Networks. 3 hours
TKT 6743	Presenting with Media. 3 hours	TKT 8990	Special Topics in Technology Teacher Education. 1-9 hours
TKT 6753	Electronic Presentations. 3 hours	TKT 9000	Research/Dissertation. 20 hours
TKT 6853	Philosophy and Principles of Vocational-Technical Instruction. 3 hours	Industrial Education:	
TKT 6990	Special Topics in Technology Teacher Education. 1-9 hours	TKI 6113	Industrial Fluid Power (PH 1113 and TKI 3103). 3 hours
TKT 7000	Directed Individual Study. 1-6 hours	TKI 6203	Automated Systems (TKI 4103). 3 hours
TKT 8000	Thesis Research/Thesis. 6 hours	TKI 6213	Survey of Energy Sources and Power Technology (three semester hours of physical science or other physics). 3 hours
TKT 8200	Internship in Vocational Education and Technology. 1-6 hours	TKI 6223	Quality Assurance (BQA 2113, ACC 1203). 3 hours
TKT 8213	Content and Method of Teaching in Career and Technology Education. 3 hours	TKI 6263	Manufacturing Technology and Processing (TKI 3363). 3 hours
TKT 8233	Career Planning and Occupational Decision Making. 3 hours	TKI 6303	Industrial Robotics (TKI 4103). 3 hours
TKT 8263	Philosophy and Administration of Vocational Education. 3 hours	TKI 6990	Special Topics in Industrial Technology. 1-9 hours
TKT 8273	Seminar in Vocational Education and Technology. 3 hours	Business Technology:	
TKT 8703	Trends and Issues in Instructional Systems. 3 hours	TKB 6283	Advanced Office Systems (TKT 1273). 3 hours
TKT 8723	Instructional Design for Industry. 3 hours	TKB 6583	Graphics and Web Design. 3 hours
TKT 8733	Telecommunications: Applications in Scholarship. 3 hours	TKB 6990	Special Topics in Business Technology. 1-9 hours
TKT 8743	Interactive Media. 3 hours	Admission Criteria for Master's Degree (M.S.T., M.S.I.T., W.E.L.):	
TKT 8763	Seminar in Planning for Instructional Technology. 3 hours	<ul style="list-style-type: none"> • 2.75 undergraduate GPA minimum from a four year accredited institution or a 3.0 graduate GPA minimum. • GRE scores 	

Admission Criteria for Education Specialist Degree—Same as for the Master’s degree, plus have earned a Master’s degree from an accredited institution.

Program of Study for Master’s and Educational Specialist Degrees :

- Minimum number of hours required for the Master’s degree: 30-33
- Minimum number of hours required for the Education Specialist degree: 30
- An comprehensive examination is required for both the Master’s and Education Specialist degrees.

Educational Leadership

Master of Science and Educational Specialist Degrees in Educational Leadership

Admission Criteria—A GPA of 2.75 on the last one-half of undergraduate work is required. A GPA of 3.00 on prior graduate work is required for the Master’s degree, and a GPA of 3.20 is required on prior graduate work for the Educational Specialist degree. The GRE is also required. Additional requirements include an entry interview, an entry portfolio, letters of recommendation, and evidence of teaching experience. An applicant should contact the department for specific guidelines.

Program of Study—The Master of Science degree in Educational Leadership requires 39 hours, and the Educational Specialist degree requires 42 hours.

Prerequisite and Core Courses for Master’s and Specialist Degrees:

EDL 8990	Technology for Educational Leaders. 3 hours
EDL 8113	Contexts of Educational Leadership. 3 hours
EDL 8123	Principles of Educational Leadership. 3 hours
EDF 8363	Functions and Methods of Research. 3 hours
EDL 8143	Educational Leaders as Instructional Leaders. 3 hours
EDL 8163	Educational Budgeting and Resource Allocation. 3 hours
EDL 8173	Legal and Ethical Perspectives of Leadership in Schools. 3 hours
EDL 8193	Educational Environments. 3 hours
EDL 8213	Internship I. 1 hour

EDL 8223	Internship II. 2 hours
EDL 8233	Internship III. 3 hours
EDL 7000	Directed Individual Study (for Ed. Specialist Degree students only). 3 hours

Doctor of Philosophy in Community College Leadership

Admission Criteria—To be eligible for regular admission to the program, the applicant must hold a Master’s degree from an accredited institution, meet the basic requirements specified for graduate students at Mississippi State University, and demonstrate academic proficiency based on the following indicators:

- Grade point average (GPA) of 3.40 on a 4.00 scale for all graduate-level credit hours completed
- Graduate Record Examination results
- Writing sample
- Structured interview
- Current résumé

Foundation and Core Courses for Doctor of Philosophy:

CCL 8113	History and Philosophy of the Community College. 3 hours
CCL 8123	Community College Finance and Budgeting. 3 hours
CCL 8233	Community College Legal Issues. 3 hours
CCL 8333	Organization and Administration of the Community College. 3 hours
EDA 8283	Educational Leadership. 3 hours
EDA 8383	Ethical Decision Making in Educational Administration. 3 hours

Interdisciplinary Requirements (21 hours):

SO 8303	Rural Sociology. 3 hours
PPA 9613	Rural Government Administration I. 3 hours
EC 6313	Introduction to Regional Economics. 3 hours
EC 6333	Applied Regional Economics. 3 hours
PPA 9623	Rural Government Administration II. 3 hours

- AEC 8993 Rural Community and Economic Development. 3 hours
- EDA 8993 Principles of Educational Facilities Design. 3 hours

Prerequisite Course:

- EPY 6214 Educational and Psychological Statistics. 3 hours

Core Courses:

- CCL 8113 History and Philosophy of the Community College. 3 hours
- CCL 8123 Community College Finance and Budgeting. 3 hours
- CCL 8233 Community College Legal Issues. 3 hours
- CCL 8333 Organization and Administration of the Community College. 3 hours
- EDA 8283 Educational Leadership. 3 hours
- EDA 8383 Ethical Decision Making in Educational Leadership. 3 hours

Research Requirements (13 hours):

- EDF 9373 Educational Research Design. 3 hours
- EPY 8214 Advanced Educational and Psychological Statistics. 3 hours
- PPA 8733 Public Program Evaluation. 3 hours
- EDA 8353 Applications of Theory to Educational Administration. 3 hours
- EDA 9000 Research/Dissertation. 20 hours

Additional Requirements (38-50 hours):

- Electives (3-6 hours)
- CCL Internship (optional)
- EDA 8213 Internship (optional)
- Career Concentration/Minor Area (12-18 hours)**
- Dissertation (20 hours)

**A total of 12-18 hours may be taken from courses in business, arts and sciences, relevant education areas, engineering, etc. Twelve hours in a content area and a minor committee member are required to declare a minor. The Southern Association of Colleges and Schools requires 18 graduate hours in a teaching field for community college instructors. Those students who fail to meet SACs requirements will be required to complete 18 hours.

NOTE: Students must complete all University and college requirements, include satisfaction of the research tool requirement. EPY 6214 Educational and Psychological Statistics or a similar course is a prerequisite for EPY 8214 Statistics (prerequisite for EPY 8214 Advanced Educational and Psychological Statistics).

Completion Requirements—Twenty hours of research/dissertation must be completed. Doctoral candidates are required to meet with committee members to prepare and present the dissertation proposal. A minimum of four committee members is required, five if the student has declared a minor.

Elementary, Middle, and Secondary Education Administration

Doctor of Philosophy in Elementary, Middle, and Education Administration

Admission Criteria—To be eligible for admission to the program, an applicant must be a practitioner holding Mississippi or reciprocal administrative licensure, have a Master's or Educational Specialist degree from an accredited institution, and meet basic requirements for doctoral students as published in The Graduate Studies Bulletin of the Office of Graduate Studies at Mississippi State University.

An applicant must submit a résumé documenting career accomplishments in professional education and satisfy requirements for graduate study as outlined in the University's graduate application packet (e.g., Letters of Recommendation, statement of purpose, transcripts, etc.).

The applicant must have a minimum 3.40 GPA on a 4.00 scale for all previous graduate work completed.

The applicant must submit acceptable scores for each of the four sections of the Graduate Record Examination (GRE).

In a brief paper the applicant should discuss what he/she has learned from prior PK-12 administrative practice.

In a personal interview the applicant should demonstrate potential for achieving excellence as an educational administrator.

A student accepted into the program is expected to have his or her own personal computer and Internet access. Approximately 10-20 students will be accepted annually.

Program of Study—Four distinct but connected thematic strands comprise the curriculum: 1) leading and managing in educational

environments, 2) applied research, 3) educational foundations, and 4) dissertation research.

1) Leading and Managing in Educational Environments (24 hours)

The focus of this strand is leadership and management. To satisfy the requirements, the student must select and successfully complete (3.00 grade point average) a minimum of eight educational administration courses listed below:

- EDA 8163 Public School Finance. 3 hours
- EDA 8173 School Law. 3 hours
- EDA 8193 Workshop in Educational Administration and Supervision. 3 hours
- EDA 8210 Internship in Supervision and Administration. 3 hours
- EDA 8223 Seminar in Educational Administration. 3 hours
- EDA 8273 Educational Administration and Supervision. 3 hours
- EDA 8283 Educational Leadership. 3 hours
- EDA 8293 Professional Development of Educational Personnel. 3 hours
- EDA 8323 Educational Facilities Design. 3 hours
- EDA 8343 School Personnel Administration. 3 hours
- EDA 8353 Applications of Theory to Educational Administration. 3 hours
- EDA 8383 Ethical Decision Making in Educational Administration. 3 hours
- EDA 8990 Special Topics in Educational Administration. 3 hours

The specific number of courses in Educational Leadership required for a particular student may vary depending on previous degrees and experience. In many instances, credit is given for previous courses taken in earning Master's and/or Educational Specialist degree(s).

2) Applied Research (15 hours)

The focus of this strand is on applied statistics and research methods. To satisfy the requirements, the student must select and successfully complete a minimum of five research courses from the list below:

- EPY 6214 Educational and Psychological Statistics. 4 hours
- EPY 8214 Advanced Educational and Psychological Statistics. 4 hours
- EDF 8363 Function and Methods of Research in Education. 3 hours
- EPY 9213 Advanced Analysis in Educational Research. 3 hours
- EPY 9263 Applied Research Seminar. 3 hours
- EDF 9373 Educational Research Design. 3 hours
- EDF 9443 Single-Subject Research Designs in Education. 3 hours
- EDF 9453 Qualitative Techniques in Educational Research. 3 hours

Whenever feasible, the student's dissertation research should address problems particular to elementary, middle, or secondary education administration.

In addition to successfully completing at least five applied research courses, students are expected to demonstrate competency in research skills in one of three ways:

- a. publish a research paper in a recognized journal,
- b. present a research paper at an annual meeting of a regional or national association, or
- c. pass an examination in statistics and applied research administered in the department.

3) Educational Foundations (12 hours)

The focus of this strand is on core foundational courses. To satisfy the requirements, the student must select and successfully complete (3.00 grade point average) a minimum of four foundation courses from the list below:

- EPY 8223 Psychological Foundations of Education. 3 hours
- EDF 8313 Philosophy of Education. 3 hours
- EDF 8323 Comparative Education. 3 hours
- EDF 8353 Principles of Curriculum Development. 3 hours
- EDF 8383 Issues in Education. 3 hours
- EDF 8393 History of Education in the United States. 3 hours

The specific number of courses in Educational Foundations required for a particular student may vary depending on previous degrees and experience. For some students, courses not appearing on the list above but taken previously in earning a Master's or Educational Specialist degree may be used to satisfy this requirement.

4) Dissertation Research (20 hours)

The focus of this strand is on dissertation writing. To satisfy the requirement, the student must successfully complete a minimum of 20 research/dissertation credits (EDA 9000).

Many of the courses in the program are taught using an intensive weekend (Friday-Saturday) format supplemented with studio-based distance learning and online e-learning. Most students proceed through studies as members of a cohort, working closely with core faculty.

Prerequisite and Core Courses:

1) Leading and Managing in Educational Environments

- EDA 8223 Seminar in Educational Administration. 3 hours
- EDA 8273 Educational Administration and Supervision. 3 hours
- EDA 8283 Educational Leadership. 3 hours
- EDA 8293 Professional Development of Educational Personnel. 3 hours
- EDA 8323 Educational Facilities Design. 3 hours
- EDA 8343 School Personnel Administration. 3 hours
- EDA 8353 Applications of Theory to Educational Administration. 3 hours
- EDA 8383 Ethical Decision Making in Educational Administration. 3 hours
- EDA 8990 Special Topics in Educational Administration. 3 hours

2) Applied Research

- EPY 6214 Educational and Psychological Statistics. 3 hours
- EPY 8214 Advanced Educational and Psychological Statistics. 3 hours
- EDF 8363 Function and Methods of Research in Education. 3 hours

- EPY 9213 Advanced Analysis in Educational Research. 3 hours
- EPY 9263 Applied Research Seminar. 3 hours
- EDF 9373 Educational Research Design. 3 hours
- EDF 9443 Single-Subject Research Designs in Education. 3 hours
- EDF 9453 Qualitative Techniques in Educational Research. 3 hours

3) Educational Foundations

- EPY 8223 Psychological Foundations of Education. 3 hours
- EDF 8313 Philosophy of Education. 3 hours
- EDF 8323 Comparative Education. 3 hours
- EDF 8353 Principles of Curriculum Development. 3 hours
- EDF 8383 Issues in Education. 3 hours
- EDF 8393 History of Education in the United States. 3 hours

4) Dissertation Research

- EDA 9000 Research/Dissertation. 20 hours

Completion Requirements—The written preliminary examination and the written and oral examination for admission to candidacy for the Ph.D. in Elementary, Middle, and Secondary Educational Administration may be taken only after the student has completed or is within six hours of completing the course work listed in his/her program (per Graduate Council, date). To meet the research skills requirements, the student is expected to be actively involved in a regional educational research association and must demonstrate competency in one of three ways: publish a research paper in a recognized journal, or present a research paper at an annual meeting of a regional or national association, or pass an examination in statistics and applied research administered in the department.