The mission of the Information Systems and Technology specialization of the Doctor of Management in Organizational Leadership degree (DM/IST) is to enable a diverse group of students to synthesize and apply new knowledge and models affecting information systems and technology (IST) from an organizational and global perspective. Students integrate critical thinking, ethical leadership, and the application of IST content areas with their professional experiences and doctoral-level research to create innovative, positive, and practical contributions to the body of IST knowledge. Graduates will be able to influence and direct their organizations positively through strong leadership and management practices within the IST environment.

DM/IST 004 Requirements

The Doctor of Management in Organizational Leadership/Information Systems and Technology requires a minimum of 62 credits, which may come from a combination of required and elective courses.

DOC700 Developing The Doctoral Identity
This foundational course is designed to promote active doctoral-level inquiry and establish the School of Advanced Studies' integrated scholarship, practice, and leadership approach. Students participate in structured activities and guided dialogue to strengthen their understanding of the doctoral program requirements and expectations for doctoral-level thinking, research, informed voice, and community building. Students will demonstrate the initiative needed to take next steps in their intellectual/doctoral journey through iterative improvements to critical thinking, reading and writing skills by applying faculty feedback, writing resources, and personal insights to a doctoral-level writing assignment. Competencies: Explain how the scholarship-practice-leadership program mission, structure, and resources align with personal context and goals. Self-assess doctoral program readiness, including detailed strategies to successfully engage at the doctoral level. Apply critical inquiry to thinking, reading, and writing skills across multiple contexts and boundaries to create original, substantive analysis and synthesis. Interpret and create an effective response to faculty feedback that promotes continuous improvement. Explore research interests to properly align with the chosen program domain of study. Engage in community building practices relevant to doctoral level education. (1 credits)

LDR711A Leadership Theory And Practice
This course provides an opportunity for students to examine leadership from various theoretical and practical perspectives in historical and contemporary contexts. Students will identify and develop leadership skills to enhance their role as a scholar, practitioner, and leader within their organizations. Competency A: Analyze historical, theoretical, and practical leadership concepts and concerns through doctoral-level research. Competency B: Synthesize, contextualize, and evaluate leadership models and theories. Competency C: Articulate the relationship between the theory and practice of leadership. Competency D: Analyze the role of leadership in fostering organizational development and innovation. Competency E: Integrate personal experience, scholarly inquiry, and reflexive approaches to learning and development. (3 credits)

DOC705R Creative And Critical Thinking
This course challenges the student to become a creative leader or problem-solver and to begin the process of personal transformation by questioning assumptions and conventional patterns of thinking. Throughout the course, students demonstrate characteristics of creative and critical thinking in individual and collaborative situations. Competencies: Actualize theory and practice to cultivate personal and group learning. Integrate critical and creative processes to initiate lifelong leadership development. Develop a scholar-practitioner-leader voice to communicate across boundaries. Review and apply models of ethical, inclusive, and compassionate behavior within the doctoral learning community. Apply research-based reflective processes to understand individual and shared epistemological and ontological positions. (3 credits)

For more information about this program, including important consumer disclosures, please visit http://www.phoenix.edu/content/altcloud/en/programs/ge/default/dm-ist.html.
RES709 Research Conceptualization And Design
This course provides an overview of social science research methodologies and their application in context to the student's degree program. Foundational concepts include the examination and application of theoretical frameworks, critical analysis of scholarly literature and interpretation of data through a theoretical lens. Students also explore quantitative, qualitative and mixed research methods and the core elements of an effective research plan. Competencies: Describe how conceptual and theoretical frameworks provide the foundational elements of social science research and inform the interpretation of data and other research findings. Identify the significance of scholarly literature and how gaps in extant literature provide a direction for new research. Summarize the ethical issues of research involving human subjects. Identify and explain quantitative and qualitative research methods and assess their appropriateness for different research problems Assess quantitative and qualitative research studies and discuss the concepts of methodological rigor, credibility, validity and reliability. Evaluate the research topic, research question, and purpose and problem statements for methodological and theoretical alignment. Establish strategies for formulating clear, concise research questions that are methodologically sound, theoretically grounded and researchable. (3 credits)

IST710 Foundations Of Information Systems Management
The primary focus of this course is the research and evaluation of innovative and practical IS approaches to problem resolution in various industries. Learners will research the strategies and leadership characteristics of IS industry leaders and analyze upcoming trends in the field. These considerations will be incorporated into the foundation of a IS leadership plan. Competency A: Trace the historical development of the field of information systems. Competency B: Investigate knowledge as a component of the field of information systems. Competency C: Analyze the infrastructure components of information systems. Competency D: Interpret the roles of technology and people within teams and organizations. Competency E: Evaluate best practices and emergent trends in information technology. (3 credits)

ORG716 Organizational Theory And Design
Upon completion of this course, students will be prepared to analyze and select appropriate paradigms to guide organizational research. Additionally, students will have the ability to systematically apply organizational theories to enrich existing models or develop new models to increase performance and effectiveness. Competencies: Analyze organizational strategies and needs to determine optimal methods for organizational design. Differentiate the roles of communication and power across the systems paradigms. Evaluate the impact of communication and power on organizational effectiveness and levels of productivity. Explore historical and current trends in organizational theory. Analyze the influence of current organization developmental practices to guide organizational research. Apply paradigms of thinking following the tenets of the scholar-practitioner-leader model toward organizational challenges and research. Explore the interplay between organizational structure and cultural competency. Determine the role and significance of ethics in organizational theory, design, and development. (3 credits)

RES710 Statistical Research Methods And Design I
This course introduces students to an array of quantitative research methods and their appropriate application in empirical research. Students will be introduced to basic statistical concepts, theory and the assumptions that govern the methodology. An overview of descriptive and inferential statistics, including nonparametric statistics will be provided. The analysis of data, data visualization and the language used for the presentation of data in the social sciences will be emphasized. Competency A: Analyze peer reviewed quantitative research and explain how the results of quantitative analysis can inform data driven decision making. Competency B: Explain the fundamentals of quantitative data analysis procedures, assumptions, and their appropriateness to different types of research design. Competency C: Discuss philosophical theories and fundamentals of quantitative methods and their applications to different types of research problems. Competency D: Determine appropriate data analysis procedures for a quantitative research design and demonstrate how to use various quantitative data analysis procedures. Competency E: Explain parametric and nonparametric statistical procedures and their appropriate use. Competency F: Conduct quantitative data analysis using statistical analysis software (IBM/SPSS) and interpret results. Competency G: Evaluate the reliability and validity of quantitative data analysis techniques. Competency H: Compose brief reports to present results of statistical data analysis. (3 credits)
DOC720R Doctoral Seminar I
DOC/720R is the first step in the formal development of the doctoral dissertation. You will review and clarify problem and purpose statements, create and refine research questions and hypotheses, identify sample populations, research methodologies and data gathering procedures and complete a précis that serves as a framework for the dissertation. The intended impact of the student’s dissertation on society, the discipline, and practitioners will be discussed. (2 credits)

MGT716 Management Philosophies
Upon completion of this course, learners will be prepared to employ a research-based approach to investigate the body of knowledge relating to management philosophies from their recorded origins to current day applications. Learners will analyze and evaluate the evolution of management theory within historical timeframes with incremental assessments of the successes or failures to optimize resources to attain performance excellence in a customer-centered organization. Competency A: Analyze how complex factors influence the evolution of management philosophy. Competency B: Compare and contrast various perspectives on different management philosophies. Competency C: Predict the influences of current complex factors on the future of management philosophy. Competency D: Integrate management philosophy with organizational leadership and practice. (3 credits)

RES720 Statistical Research Methods And Design II
(3 credits)

IST722 Information Technology For Teams
Learners in this course will further evaluate the application of the domains studied in IST/721 and how those domains are applied in a team setting. The application of the program domains will be examined in the context of support necessary to implement various organizational team models, ranging from co-located teams to geographically distributed virtual teams. Upon completion of this course, the learner will be prepared to define and analyze issues related to the management and support of information technology necessary for organizational teams’ operations. Competency A: Analyze the interrelationships and communication patterns of individual knowledge workers as they function in multiple team settings. Competency B: Analyze how knowledge management systems support global team functions. Competency C: Assess strategies, methods, and tools for advancing team operations and performance and for mitigating issues. Competency D: Apply web, networking, database, programming, management, and systems development and design domains as appropriate to teams and operations performance. Competency E: Evaluate the influence of technology trends, social networking, mobility, and best practices on team decision making and operations, including global, virtual, and co-located teams. Competency F: Examine the effects of e-Commerce on the ability of teams to function and respond to user and customer requirements. (3 credits)

RES724 Qualitative Methods And Design
This class presumes some basic understanding of the foundations and underlying assumptions in the field of qualitative research as well as examples of practice. Building upon this preexisting foundational understanding, the purpose of the class is to enhance students’ understanding and craft through reading, writing, and reflecting on the practice of qualitative inquiry. Specific focus is on the design and development of qualitative research studies. Competency A: Differentiate between the various qualitative designs i.e. phenomenological, case study, ethnographic, grounded theory, and content analysis. Competency B: Evaluate the alignment of the qualitative designs to identified problems. Competency C: Evaluate the components of qualitative data collection and the appropriateness of each approach to an expressed conceptual framework. Competency D: Analyze the limitations of qualitative research and approaches for overcoming research challenges. Competency E: Analyze issues and concerns regarding the concepts of reliability and validity as they relate to qualitative research. Competency F: Address ethical issues that are inherent in qualitative research. Competency G: Develop a research methodology for a study incorporating best practices of the qualitative design chosen. (3 credits)
IST723  Departmental Information Systems
This course will continue the analysis of the application of the domains used by individuals and teams studied in IST721 and IST722. The learner will evaluate the application of the program domains to departmental operations and strategy. The learner will research and evaluate information systems support techniques, both internal and external to the departmental interfaces. Competency A: Analyze how knowledge workers function with the use of technology at the department level in a global environment. Competency B: Plan methods of support, communication, and selections of tools to advance department operations and performance. Competency C: Evaluate the applications of domains into systems development as appropriate to department operations and performance. Competency D: Determine the influence of current information technology issues and policies on departmental information systems. Competency E: Evaluate the alignment among departmental information systems, as related to organizational goals and objectives, and enterprise resource planning (ERP) systems. (3 credits)

DOC723  Doctoral Seminar II
In this course students refine the requisite skills necessary to further their dissertation concept for review and approval. Students expand their work from Second-Year Residency by applying critical analysis to refine the research method, inform the selection of a research design, and to develop a focused literature review. Competencies: Articulate knowledge gaps in a selected field by synthesizing relevant literature in content, theoretical/conceptual framework, and research methodology and design. Define appropriate research methodology and design for a research study. Describe the scope, limitations and delimitations, population, sample, and possible instrument(s) used in a research study. Evaluate the relevance of research studies related to the selected research topic. Synthesize historical and current sources of literature plus theoretical/conceptual and methodological/design literature relevant to the selected research topic. (3 credits)

IST724  Organizational Information Systems Management
This course will build upon the considerations examined in the prior IST courses. Upon completion of this course, the learner will be prepared to evaluate and develop integrated strategies for the implementation of the IST domains within an organization. Competency A: Analyze the complexities of IST systems and their application to organizational operations and performance. Competency B: Evaluate the alignment among information systems, organization strategies, and objectives. Competency C: Integrate tools, process, and metrics to accomplish organizational objectives. Competency D: Develop leadership approaches to promote communication and collaboration between technology and business leaders. (3 credits)

DOC733R  Doctoral Seminar III
(3 credits)

DOC734R  Doctoral Seminar IV
(2 credits)

IST732  Global Information Systems Management
This course extends the examination of the IST domains studied throughout the program to the global level. Learners will examine the application of the IST domains in the setting of a global economy and international business environment. Learners will be prepared to define the common information system (IS) management approaches for the development of business systems that can support global information systems requirements. Competency A: Define IS management approaches for the development of business systems that can support global information systems requirements. Competency B: Define issues of security, virtual and collocated IS teams, networking, information transparency, intellectual property, organizational and regional cultures, and human resources between global partners. Competency C: Synthesize a leadership and management strategy for integration of whole systems in an environment that is legally compliant with multinational jurisdictions. Competency D: Create an original leadership and management model that provides explanation and predictability. (3 credits)

RES725  Descriptive And Comparative Data Analysis
Course Description
This course focuses on statistical analysis methods and reporting of results when describing and comparing data from groups. Learners will explore the assumptions, advantages, limitations, and appropriate applications of these quantitative approaches. The methods covered will include comparison of means for various forms of data including multiple means using methods of basic and advanced factorial ANOVA. Multivariate comparisons will also be explored under conditions of multiple independent and dependent variables using techniques including Hotelling’s T², MANOVA, and related techniques. Depending on the learners’ needs, other approaches may be covered.

Course Competencies
- Demonstrate understanding of how and when to use various quantitative data analysis procedures.
- Demonstrate understanding of nonparametric testing procedures and parallel parametric procedures and when to use them.
- Select appropriate data analysis procedures for a quantitative research design.
- Perform statistical analysis using the appropriate software.
- Interpret results of quantitative data analysis procedures.
- Evaluate the reliability and validity of quantitative data analysis procedures and result reporting. (3 credits)
RES727 Approaches To Phenomenological Inquiry And Data Analysis
This course is designed to provide advanced graduate students with instruction in qualitative phenomenological approaches as applied to social science research with the primary focus on data collection, analysis, interpretation, and presentation. The course will emphasize individual and group interviewing as techniques for phenomenological data collection. Focus is placed on analysis approaches appropriate for and relevant to phenomenological research. Competency A: Differentiate between transcendental and hermeneutic phenomenology. Competency B: Develop a phenomenologic attitude toward researching a phenomenon. Competency C: Develop and refine research questions to align with phenomenological research design. Competency D: Apply phenomenologic concepts, tools, and techniques to data analysis of a phenomenon. Competency E: Develop and refine a research tool and interviewing techniques to elicit desired data. Competency F: Analyze techniques for presenting research findings based on phenomenologic orientation. Competency G: Evaluate reliability, internal and external validity, and transferability in phenomenological inquiry. (3 credits)

RES728 Qualitative Case Study
This course is designed to provide advanced graduate students with instruction in qualitative case study research approaches as applied to social science research. The course will emphasize individual and group interviewing as techniques for qualitative case study data collection. This course is particularly useful for advanced doctoral students who plan to conduct a qualitative dissertation. Focus is placed on analysis approaches appropriate for and relevant to case study research. Competency A: Explain the epistemological stance, uses, and approaches of case study research. Competency B: Determine how to define the boundaries of a case to address research issues. Competency C: Articulate the influence of the researcher on the process and outcomes of a research study. Competency D: Determine the types of data that can be collected from a defined case. Competency E: Determine appropriate methods for sample selection and data collection for a defined case. Competency F: Apply appropriate data analysis or interpretation techniques to a set of case study data. Competency G: Evaluate reliability and validity in case study inquiry. Competency H: Evaluate the ethical issues involved in choosing a sample, gathering data, and reporting the results of case study research. (3 credits)

RES729 Ethnomethodology And The Study Of Culture
In this course, students will build knowledge of and competence with data analysis techniques developed in the anthropological tradition of ethnography. Integrating data from multiple collection methods (e.g. observational field notes, interviews, analyses of cultural artifacts), students will develop coding/thematic grouping protocols as well as strategies to develop findings into comprehensive interpretation of a particular culture. The course will conclude with a comprehensive overview of the process and practice of writing up ethnographic texts, centering largely on “thick description” as a critical mode of representation. Competency A: Explore the theoretical evolution of ethnography through cultural and social anthropology. Competency B: Examine philosophies and methodologies underpinning ethnographic research. Competency C: Determine appropriate ethnographic design, data collection methods, and analysis techniques for various applications. Competency D: Apply ethnographic design to an identified researchable issue. Competency E: Analyze ethnographic results to present findings appropriately to stakeholders. (3 credits)

RES745 Grounded Theory Methods
This course is designed to provide advanced graduate students with instruction in higher level qualitative approaches that was originally applied to social science research; but can now be found in the fields of business, education, and health care, where the research objective is the development of theory through data saturation. Building upon an existing understanding of qualitative inquiry, students explore the concept of data within grounded theory as well as the techniques and processes traditionally found within grounded theory, such as the constant comparative method and situational analysis. Focus is placed on the steps and procedures for analyzing data primarily through interviews and focus groups within the grounded theory context. Competency A: Demonstrate understanding of the philosophical and historical background, concepts, and multiple theories pertaining to grounded theory. Competency B: Distinguish between the current theories and the application of grounded theory. Competency C: Recognize the importance of data collection, preparation, and analysis to identify different techniques pertaining to various grounded theory methods. Competency D: Explain the process of developing a grounded theory design using one of the theoretical models. Competency E: Apply the principles of grounded theory to data collection, preparation and analysis processes. Competency F: Produce an original grounded theory research study framework. (3 credits)
RES746 Mixed Methods
The Mixed-Methods course focuses on both conceptual issues surrounding the use of mixed methods in business, education, nursing and social science research and the analysis of data using mixed methods. The course will involve scrutiny of published mixed-method research throughout, and uses published research for reference purposes throughout the course. Students are expected to develop skills in mixed-method research by engaging in actual analysis of data using mixed methods. Thus, the course will blend conceptualization, design, and analysis. Content of the course represents a clear recognition of the importance of mixed methods in research and the growing importance of a solid knowledge of both quantitative and qualitative approaches -- and their blending -- to actually design and conduct meaningful doctoral level research.
Competencies: Explain the nature of the mixed method research method and the various approaches to conducting mixed method research. Justify the application of an appropriate mixed method research design to a research problem. Create research questions (hypotheses) that align with the application of a given mixed method design and research problem Apply appropriate knowledge, theories, analytical skills, and methodology in a substantive interest area using a mixed method design. Determine appropriate sampling approaches, sample size, and data saturation/statistical power for the qualitative and quantitative phases in mixed method research studies. Compare qualitative and quantitative data collection techniques and instrumentation and their application in mixed method research studies. Align qualitative and quantitative data analysis techniques and procedures with a given mixed method design, variables and phenomena, and data. Evaluate the qualitative and quantitative validity concerns in mixed method research studies. (3 credits)

RES726 Correlational Methods Of Analysis
This course focuses on statistical approaches to analysis and reporting when examining bivariate and multivariate relationships among variables. Students will explore the underlying assumptions, advantages, limitations and appropriate application of correlation/regression based approaches to data analysis. The course will cover basic correlation methods, simple and multiple regression techniques, and advanced multivariate procedures including factor analysis and structural equation models. Depending on the students’ needs, other approaches may be covered. Competency A: Examine different models of multiple regression and how those models address different research questions. Competency B: Apply the fundamental statistical concepts in multiple regression analyses. Competency C: Analyze the relationship among ANOVA, regression, and correlation. Competency D: Evaluate common data visualization strategies used in correlation and regression analysis. Competency E: Conduct data analysis for regression and correlation research. Competency F: Present results of correlation and regression analysis and interpretation. (3 credits)

DOC741 Doctoral Dissertation
(3 credits)

IST733 Information Systems Management Architecture
In this course, learners will create an innovative model, incorporating the domains and models from previous coursework. In the model building, learners will demonstrate the leadership competencies as related to IT. Competency A: Articulate a detailed leadership strategy for integrating all IST functions from the individual to the global level. Competency B: Apply the best information systems management approach for the development of business systems that can support global information systems requirements. Competency C: Align benchmarks and measures of IT performance with performance measures used by organizations. Competency D: Develop an IT leadership model that incorporates each of the IT domains and considers individual, team, department, organization, interorganization, and global perspectives. (3 credits)

DOC742 Doctoral Project IV
(3 credits)

DOC741R Annual Renewal Residency
(2 credits)