AVIATION (AVIA)

AVIA 701 Orientation to Doctoral Study and Research 3 Credit Hour(s)
This course orients students to the Ph.D. program and the skills and competencies necessary for success in coursework and the dissertation. This course socializes students to what it means to be a Ph.D. candidate and how learning throughout the program informs multiple outcomes including coursework, research, scholarship, and post-doctoral opportunities.
Offered: Online

AVIA 705 Advanced Aviation Research Orientation 3 Credit Hour(s)
This course will investigate and explore current research in the aviation discipline along with an in-depth overview of research methodologies. Students will learn the dissertation process and begin to explore aviation research topics of interest for dissertation development.
Offered: Online

AVIA 706 Advanced Aviation Investigation 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705
This course builds from work in Advanced Aviation Research Orientation to further investigate aviation research and identify a dissertation topic. Students will investigate the topic and develop research questions and methodologies.
Offered: Online

AVIA 710 Global Aviation Law 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
This course is an in-depth study into global law investigating jurisdiction, airspace, treaties, accident investigation, terrorism, and decision making. Candidates will be challenged to apply a biblical world perspective while analyzing global aviation policy and legislation.
Offered: Online

AVIA 725 Current Practices and Future Trends in Aviation 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
This course explores all aspects of the aviation industry in current practices and future trends using a research-based approach to identifying problems and seeking solutions. Candidates will identify current problems in aviation and develop a systems approach to critically analyzing the problems and seeking solutions. Candidates will explore future research methods used in predicting future trends.
Offered: Online

AVIA 735 Human Factors and Aviation Automation 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
This course will investigate and explore the intersection of human factors and aviation automation in manned and unmanned aircraft, as well as other related aviation systems. Candidates will evaluate current research and critically analyze aviation automation systems design and operation from a human factors perspective. Candidates will be challenged to apply a biblical world perspective to human factors in aviation automation.
Offered: Online

AVIA 745 The Economic Environment of Aviation 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
This course will investigate and explore the growth and sustainability of the aviation industry in terms of economics, the environment, and its impacts on other industries. Candidates will evaluate current research and critically analyze current and future problems related to aviation growth and sustainability. Candidates will be challenged to apply a biblical world perspective to solving problems and issues related to aviation growth and sustainability.
Offered: Online

AVIA 755 Contemporary Issues in Aviation Policy 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706 and AVIA 710
This course investigates and analyzes current aviation policy issues and the impact of government and international policy and regulations on the aviation industry. Candidates will evaluate current policy, regulatory, and legislative procedures and how each stakeholder in the process may have inputs. Candidates will analyze how aviation research can help to inform the policy, regulatory, and legislative process. Candidates will be challenged to apply a biblical world perspective to analyzing and developing aviation policy, regulations, and legislation.
Offered: Online

AVIA 800 The Ethical Aviation Leader 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
The course is an examination of ethics from the perspective of an aviation leader. Students will evaluate the theoretical and practical approaches to leading and living ethically within the aviation environment and the context of a Christian Worldview.
Offered: Online

AVIA 801 Teaching Aviation in Higher Education 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
This course provides a comprehensive overview of teaching aviation in higher education, equipping students with the knowledge and skills necessary for pursuing careers in post-secondary education. The aviation industry is constantly evolving, and this course will prepare educators to meet the unique challenges of teaching aviation subjects in a higher education setting.
Offered: Online

AVIA 802 The Safety Practitioner 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706
The course is an inquiry into past occurrences, current issues, and future developments related to aviation safety. Students will examine theoretical and practical matters through the lens of epistemology and ontology and in the context of a Biblical worldview.
Offered: Online

AVIA 812 Advanced Aviation Statistics 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705
This course involves an examination of descriptive statistics and basic inferential statistical techniques. Hypothesis testing, confidence intervals, analysis of variance, correlation techniques, and nonparametric statistical methods will be discussed.
Offered: Online

AVIA 815 Quantitative Methods of Research 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706 and AVIA 812
This course is designed for those planning to write a dissertation.
An examination of quantitative designs for educational research
topics will be considered. These are: Developing a research problem,
Reviewing the Literature, The Hypothesis, Descriptive Statistics,
Sampling and Inferential Statistics, Tools of Research, Validity and
Reliability, Experimental Research Designs, Ex Post Facto Research,
Correlational Research, Survey Research, Guidelines for Writing a
Quantitative Research Proposal, and Interpreting and Reporting Results
of Quantitative Research.
Offered: Online

AVIA 817 Qualitative Methods of Research 3 Credit Hour(s)
Online Prerequisite: AVIA 701 and AVIA 705 and AVIA 706 and AVIA 812
and AVIA 815
This course examines qualitative methods used in educational research,
focusing primarily on participant-observation, asking questions, writing
field notes, and the transformation of these primary field data into written
ethnographic documents.
Offered: Online

AVIA 860 Literature Review for Advanced Research 3 Credit Hour(s)
Online Prerequisite: (AVIA 915 or AVIA 917) and AVIA 701 and AVIA 705
and AVIA 706
This course provides doctoral students with advanced research skills
and strategies for conducting a literature review. Critical thinking skills,
synthesis of information, and application of the literature are emphasized
to support the feasibility and relevance of a research study.
Offered: Online

AVIA 915 Advanced Quantitative Methods of Research 3 Credit Hour(s)
Online Prerequisite: AVIA 812 and AVIA 815 and AVIA 817
This course addresses the skills and knowledge necessary for completion
of a quantitative dissertation, including research design, analysis, and
associated statistical procedures. This course also addresses sampling,
assumptions, data interpretation, validity, reliability, and instrumentation.
Offered: Online

AVIA 917 Advanced Qualitative Methods of Research 3 Credit Hour(s)
Online Prerequisite: AVIA 812 and AVIA 815 and AVIA 817
This course addresses the skills and knowledge necessary for completion
of a qualitative dissertation including research design, data analysis
and representation, methods for increasing trustworthiness, and ethical
considerations in research with human subjects.
Offered: Online

AVIA 980 Research Concepts and Methodology 3 Credit Hour(s)
Online Prerequisite: (AVIA 915 or AVIA 917) and AVIA 860
Required of all candidates in a School of Aeronautics doctoral program.
Review of the candidate's proposed dissertation research concepts and
methodology under the supervision of a research consultant.
Offered: Online

AVIA 987 Dissertation I 5 Credit Hour(s)
Online Prerequisite: AVIA 980
This sixteen-week course assists candidates in completion of their
dissertation proposal under the supervision of a dissertation chair and
committee.
Offered: Online

AVIA 988 Dissertation II 5 Credit Hour(s)
Online Prerequisite: AVIA 987
This sixteen-week course assists candidates in completion of their
dissertation data collection and analysis under the supervision of a
dissertation chair and committee.
Offered: Online

AVIA 989 Dissertation III 5 Credit Hour(s)
Online Prerequisite: AVIA 988
This course focuses on developing the dissertation.
Offered: Online

AVIA 990 Dissertation IV 0 Credit Hour(s)
Online Prerequisite: AVIA 989
This course directs candidates in publishing the approved final
dissertation.
Offered: Online