

## Approved Electives for the Masters of Digital Sciences (MDS)

The courses below are approved electives for the MDS. They are PLANNED for the semesters indicated and are not guaranteed. Some require pre-requisites or approval to schedule. When that is the case, please email the person designated. INCLUDE: Your Name, Student Number, Concentration, and state that you are a DS student. Please be aware that if a class is closed, you may not ask that a space be made for you. You can, however, ask if there are plans for more space.

| Fall | Spring      | Summer | Approved Electives  |       |   | Pre-requisites                                       |
|------|-------------|--------|---|-------|---|--|
|      |             |        | Communication Studies   |       |   |  |
|      | Even Years  |        | COMM  | 65661 | Communication in an Information Society (3)                 |  |
|      | Even Years  |        |   | 65675 | Communication, Uncertainty and Privacy Management (3)       |  |
|      | Even Years? |        |   | 65685 | Communication and Cognition (3)                             |  |
| X    |             |        |   | 65851 | Organizational Communication (3)                            |  |
|      |             |        | Computer Science (email mcurtiss@kent.edu) Those with an undergraduate degree in CS may ask for permission for CS courses. www2.kent.edu/CAS/CS/resources/courseinfo.cfm                              |       |   |  |
|      |             |        | CS  | 53005 | Introduction to Database Systems Design (3)                 |  |
|      |             |        |   | 53401 | Secure Programming (3)                                      | C or better in CS 33001                              |
| X    |             |        |   | 56101 | Design and Analysis of Algorithms (3)                       | CS 33001 and MATH 12003                              |
|      |             |        |   | 57205 | Information Security (3)                                    | CS 33001   |
| X    | X           |        |   | 61002 | Algorithms and Programming I (4)                            | Email for pre-req removal                            |
| X    | X           |        |   | 61003 | Algorithms and Programming II (4)                           | CS 61002   |
|      | Odd Years   |        |   | 63901 | Software Engineering Methodologies (3)                      |  |
|      |             |        | Digital Sciences (email klevand1@kent.edu)  |       |   |  |
| X    | X           |        | DSCI  | 51510 | Project Management & Team Dynamics (3)                      |  |
| X    | X           |        |   | 59995 | ST: Digital Systems Security (3)                            |  |
|      | X           |        |   | 69995 | ST: Advanced Project Management (3)                         | DSCI 51510 or PM course in undergraduate curriculum. |
| X    | X           |        |   | 61010 | Enterprise Architecture (3)                                 |  |
|      | X           |        |   | 62010 | Business Architecture (3)                                   | DSCI 61010   |
|      | X           |        |   | 64010 | Data Architecture (3)                                       | DSCI 61010   |
| X    | X           |        |   | 64210 | Data Science (3)  | DSCI 61010   |
| X    | X           |        |   | 65010 | Application and Technology Architecture (3)                 | DSCI 61010   |
| X    | X           | X      |   | 69992 | Internship in Digital Sciences (1-6)                        | Approval (form available online)                     |
| X    | X           | X      |   | 69996 | Individual Investigation in Digital Sciences (1-3)          | Approval (form available online)                     |
|      |             |        | Evaluation and Measurement  |       |   |  |
|      |             |        | EVAL  | 65510 | Statistics I for Educational Services (3)                   |  |
|      |             |        | Geography (email mchurch1@kent.edu)   |       |   |  |
| X    |             |        | GEOG  | 59070 | Geographic Information Science (3)                          |  |
| X    |             |        |   | 59085 | Web and Mobile GIS (3)                                      |  |
|      |             |        | Information and Knowledge Management (even if there is space, put yourself on waitlist http://faculty-lslis.kent.edu/~iakmwaitlist/) For questions and semester offerings, email slisinform@kent.edu. |       |   |  |
|      |             |        | IAKM  | 60002 | Knowledge Organization Structures, Systems and Services (3) |  |
|      |             |        |   | 60101 | Information Architecture I (3)                              |  |
|      |             |        |   | 60102 | Information and Visual Design (3)                           |  |
|      |             |        |   | 60104 | Usability I (3)   | IAKM 60120 and IAKM 60121                            |
|      |             |        |   | 60105 | Information Technologies (3)                                | IAKM 60120 and IAKM 60121                            |
|      |             |        |   | 60110 | Content Management Systems (3)                              | IAKM 60105   |
|      |             |        |   | 60114 | Usability II (3)  | IAKM 60104 and IAKM 60121                            |
|      |             |        |   | 60121 | User Experience Design in Practice (3)                      | IAKM 60120   |

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|------------|------------|--------|---|-------|---|----------------|
|            |            |        |   | 60301 | Foundational Principles of Knowledge Management (3)   |                |
|            |            |        |   | 60302 | Foundations of Document Management (3)                | IAKM 60301     |
|            |            |        |   | 60305 | Communities of Practice (3)                           | IAKM 60301     |
|            |            |        |   | 60306 | Organizational Culture Assessment (3)                 | IAKM 60301     |
|            |            |        |   | 60311 | Business Process Management (3)                       | IAKM 60301     |
|            |            |        |   | 60312 | Business Intelligence-Competitive Intelligence        | IAKM 60301     |
|            |            |        |   | 60370 | Semantic Analysis Methods and Technologies (3)        | IAKM 60301     |
|            |            |        |   | 60401 | Health Informatics Management (3)                     |                |
|            |            |        |   | 60402 | Legal Issues in Health Informatics (3)                | IAKM 60401     |
|            |            |        |   | 60403 | Health Information Systems (3)                        | IAKM 60401     |
|            |            |        |   | 60410 | Health Records Management (3)                         | IAKM 60401     |
|            |            |        |   | 60411 | Clinical Analytics (3)                                | IAKM 60401     |
|            |            |        |   | 60412 | Clinical Decision Support (3)                         | IAKM 60401     |
|            |            |        | <b>Instructional Technology (email <a href="mailto:pcosgro1@kent.edu">pcosgro1@kent.edu</a>), More information at <a href="http://www2.kent.edu/ehhs/itec/schedule-of-courses.cfm">http://www2.kent.edu/ehhs/itec/schedule-of-courses.cfm</a>.</b>  |       |   |                |
|            | X          |        | ITEC  | 57413 | Digital Video in Education (3)                        |                |
| X          | X          |        |   | 57427 | Technology and Learning (3)                           |                |
| X          | X          | X      |   | 57430 | Computer Applications in Education (3)                |                |
| X          | X          | X      |   | 67403 | Instructional Design (3)                              |                |
|            | Even Years |        |   | 67410 | Simulation Games in Education (3)                     |                |
| Even Years |            |        |   | 67417 | Advanced Instructional Design (3)                     |                |
|            | X          |        |   | 67425 | Managing Technological Change (3)                     |                |
|            | X          |        |   | 67432 | Designing Multimedia for Instruction (3)              |                |
|            | Odd Years  |        |   | 67435 | Virtual Reality (3)                                   |                |
| X          |            |        |   | 67437 | Web Development for Educators (3)                     |                |
| X          |            | X      |   | 67438 | Instructional Applications of the Internet (3)        |                |
|            | X          |        |   | 67442 | Designing Online Courses (3)                          |                |
| Odd Years  |            |        |   | 67444 | Teaching Online Courses (3)                           |                |
| X          |            |        |   | 67449 | Research in Online Learning (3)                       |                |
|            |            |        | <b>Library and Information Science (even if there is space, put yourself on a waitlist at <a href="http://www2.kent.edu/slis/courses/waitlisting.cfm">http://www2.kent.edu/slis/courses/waitlisting.cfm</a>) For questions email <a href="mailto:slisinform@kent.edu">slisinform@kent.edu</a>. More information at <a href="http://www2.kent.edu/slis/courses/index.cfm">http://www2.kent.edu/slis/courses/index.cfm</a>.</b> |       |   |                |
| X          |            | X      | LIS   | 60613 | Information Needs, Seeking and Use (3)                |                |
| X          |            |        |   | 60637 | Metadata Architecture and Implementation (3)          | LIS 60002      |
| X          |            |        |   | 60638 | Digital Libraries (3)                                 | LIS 60003      |
|            |            |        |   | 60644 | Information Science (3)                               |                |
|            | X          |        |   | 60645 | Database Systems (3)                                  | LIS 60003      |
|            |            |        |   | 60646 | User Interfaces for Information Retrieval Systems (3) |                |
|            |            |        | <b>Management and Information Systems (email <a href="mailto:Iditchey@kent.edu">Iditchey@kent.edu</a>) RU = Recent Undergraduates, PRO = Professionals</b>  |       |   |                |
| PRO        | RU         | X      | MIS   | 64042 | Globalization and Technology Strategy (3)             |                |
|            |            |        |   | 64080 | Emerging Hardware and Software Technologies (3)       | Approval       |
|            |            |        |   | 64081 | Data Communications (3)                               | Approval       |
|            |            |        |   | 64082 | Database Management Systems (3)                       | Approval       |
|            |            |        |   | 64083 | Information Security: A Managerial Perspective (3)    | Permission     |
| RU         | PRO        |        |   | 64158 | Leadership and Managerial Assessment (3)              |                |
|            |            |        | <b>Technology - IF you have the pre-requisite learning, email professor of course for permission.</b>   |       |   |                |

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|------|--------|--------|--------------------|-----------------------------|---|---|
| X    | X      |        | TECH               | 56411                       | Requirements Engineering and Analysis Technology (3)                    | TECH4/56330, CS 61002 or programming experience (email the professor and tell him what programming languages you know). |
|      |        |        |                    | 56330                       | Visual Basic Programming in Engineering Technology (3)                  |   |
| X    | X      |        |                    | 56350                       | Network Management and Design Technology (3)                            |   |
|      |        |        |                    | 63020                       | Fiber Optic Systems (3)   | TECH 33220  |
|      |        |        |                    | 63050                       | TRIZ-Theory of Inventive Problem Solving (3)                            |   |
| X    | X      |        |                    | 64312                       | Advanced Wireless Telecommunication System and Network Technologies (3) | TECH 56312 or past content in topology, infrastructure and/or architecture of Wireless and PSTN                         |
|      |        |        |                    | 65330                       | Advanced Visual Basic Programming in Engineering Technology(3)          | TECH 56330  |
| X    | X      |        |                    | 66380                       | Advanced Networking (3)   |   |
|      |        |        |                    | Visual Communication Design |   |   |
|      |        |        | VCD                | 55000                       | Graphic Design Perspectives (3)   |   |
|      |        |        |                    | 60121                       | User Experience Design in Practice (3)                                  |   |

**REQUESTING APPROVAL FOR A CLASS NOT LISTED -** If you would like to request a course that is not listed above to be counted toward your degree, you must (1) Sign up for the class (2) Email [klevand1@kent.edu](mailto:klevand1@kent.edu) and ask that the class be allowed for you. **PLEASE INCLUDE YOUR ID#, Concentration, and undergraduate major.** The director will make a decision on whether the class will be counted for you.