University of Georgia - Undergraduate/Graduate Dual Degree Pathway Proposal (Double Dawgs)

Dual degree pathway proposals include more than one degree. Please provide the following information for each unit involved:

Dual Degree Pathway (Major(s) and Degrees): ***Computer Science BS/Artificial Intelligence MS***	
Undergraduate Major Information	**Graduate Major Information**
*Undergraduate Major Name and Degree: Bachelor of Science (BS) in Computer Science	*Graduate Major Name and Degree: Master of Science (MS) in Artificial Intelligence
Undergraduate Major Department Name: Computer Science	Graduate Major Department Name: Inst. For Artificial Intelligence
*Undergraduate Major School/College Name: Franklin College of Arts & Sciences	*Graduate Major School/College Name: Franklin College of Arts & Sciences
*Undergraduate Major Advising Contact (Name, Office, Department, Phone Number): Dr. Bradley Barnes, 215 Boyd GSRC, 706 583 0826	*Graduate Major Advising Contact (Name, Office, Department, Phone Number): Dr. Adam Goodie, 512 Psychology, 706-542-6624, goodie@uga.edu
*Effective Semester for Dual Degree Program: Fall 2017	
*Dual Degree Pathway Contact(s) (Name, Email, Phone Number, Department): Dr. Bradley Barnes, 215 Boyd GSRC, bjb211@uga.edu,706 583 0826 Contact for person completing the form if different from Dual Degree Program Contact(s): (Name, Email, Phone Number, Department): _____	

*Indicates required field.

Curriculum:

It is important to ensure that the integrity of each individual program is maintained when selecting courses (maximum 12 credit hours) that may be used to satisfy the requirements of both programs. Please provide the following information:

- Include the following dual degree pathway requirements:
  - Specify which graduate-level courses will be used to satisfy undergraduate program requirements.

    Student needs to take 12 hours of CS Major electives or BS upper division course work at the 6000 level from the list of required courses or electives for the MS in AI degree. The following are some of the courses that fulfill the above requirements:

    CSCI 6380: Data Mining (4 hours)
    CSCI 6550: Artificial Intelligence (3 hours)
    CSCI 6330: AI and the Web (4 hours)
    CSCI 6360: Data Science (4 hours)
    CSCI 6530: Introduction to Robotics (4 hours)
    CSCI 6560: Evolutionary Computing (4 hours)
    CSCI 6540 Symbolic Programming (3 hours)
    CSCI 6800 Human Computer Interaction (4 hours)

  - Provide any additional requirements that are unique to the dual degree program, such as certain courses or groups of courses (e.g., Area of Emphasis) that students must complete and/or any limitations on course selection.

    Student must satisfy all the course requirements for the BS in CS and the MS in AI.
    Student must take at least **12** hours in courses open to graduate students only.

    The candidate must register for ARTI 7300 Master's Thesis for at least **3** hours of credit while working on research.

- Provide a sample program of study for the dual degree program.

Five-Year Sample Plan of Study for BS Computer Science/MSAI

YEAR ONE			
Fall Courses		**Spring Courses**	
Gen Ed III: CSCI 1301	4	CSCI 1302	4
Gen Ed I: MATH 2250	4	CSCI Math Elective	4
Gen Ed I: ENGL 1101/1101E/1101S	3	Gen Ed I: ENGL 1102/1102E/1102M/1050H/1060H	3
Gen Ed IV: World Languages & Culture	3	Gen Ed IV: World Languages & Culture	3
First year odyssey	1	P.E. Requirement	1
Hours	15	Hours	15
YEAR TWO			
Fall Courses		**Spring Courses**	
CSCI 1730	4	CSCI 2720	4
CSCI 2610	4	CSCI 2670	4
Gen Ed V: Social Sciences HIST 2111/2112	3	Gen Ed II: Life Sciences w/ Lab	4
Gen Ed IV: World Languages & Culture	3	Gen Ed V: Social Sciences POLS 1101	3
General Elective	1		
Hours	15	Hours	16
YEAR THREE			
Fall Courses		**Spring Courses**	
CS Systems Design course, e.g., CSCI 4760	4	Application Design course, e.g., CSCI 4050	4
CSCI 3030 Computing, Ethics and Society	3	CSCI 4000-level elective, e.g., CSCI 4470	4
CSCI/MATH elective	3	Gen Ed II: Physical Sciences w/ Lab	4
Franklin Literature course	3	Franklin Fine Arts/Phil/Reli & Multicultural course	3
Major Related Elective - Science	3		
Hours	16	Hours	15
YEAR FOUR			
Fall Courses		**Spring Courses**	
Computer Architecture course, CSCI 4720	4	**CSCI 6000-level elective**, e.g., CSCI 6800	**4**
CSCI 6380 Data Mining/AI required/CS elective	**4**	CSCI/MATH elective (Upper Division)	4
Upper Division General Elective	3	Gen Ed V: Social Sciences	3
CSCI 6550 Artif. Intelligence/AI required/CS elective	**3**	Gen Ed IV: Humanities & the Arts	3
ARTI 8800 Faculty Research Seminar	1	Upper Division General Elective	1
Hours	15	Hours	15
YEAR FIVE			
Fall Courses		**Spring Courses**	
AI 8000 level course	4	PHIL 6310 Philosophy of Mind	3
PHIL 6510 Deductive systems/ AI required	3	CSCI 8950 Machine Learning	4
AI 8000 level course	4	ARTI 7300 Master's Thesis	3
ARTI 7000	1	ARTI 7000	2
Hours	12	Hours	12

Notes: **Bold** => counts for both degrees (max 12 hrs)
Red/Underlined => only counts for MS degree

Admission Requirements:*

Admission to Pathway

- Specify how students will be admitted to the dual degree pathway:
    - Address how and when students will apply to the dual degree pathway.

At least 60 hours completed at the time of application. Application will be made to the Institute for Artificial Intelligence.

    - Include specific admittance requirements, such as coursework, GPA, and required tests.

Additional requirements include an overall undergraduate GPA of 3.2

    - Admission to the dual degree pathway does not guarantee admission to the graduate program.

Admission to Graduate Program

- Specify admission requirements for the graduate degree program.

Students who meet all of the following requirements will be eligible to apply for the MSAI program:

- GRE and TOEFL (for foreign applicants) scores that satisfy the UGA graduate admissions requirements.
- *GPA*: Minimum cumulative undergraduate GPA of 3.2 for all courses taken.

**Admission requirements for the dual degree pathway may be different from the admission requirements for the graduate degree program.*

Career and Academic Opportunities

Students who complete the Computer Science (B.S.) / Artificial Intelligence (M.S.) Double Dawgs degree program have numerous career opportunities in industry as well as academia.

Students can find employment in companies, research centers and labs focusing on Machine Learning, Data Mining, Data analytics, Big Data, Incremental and Deep learning as well as several other specialties.

Students can also pursue Ph.D. or other advanced degrees in numerous areas including Artificial Intelligence, Machine Learning, Computer Science, and Data Science.

Resources:

- Describe any additional resources required to implement the dual degree pathway. If additional resources are needed, indicate how such needs will be addressed.

None.

Note: Assessment will not be addressed for the dual degree pathway, as each degree will be assessed as part of the individual program review process.

Completed and signed dual degree pathway proposal forms should be submitted to the Office of Curriculum Systems at currsys@uga.edu or 319 New College.

University of Georgia - Undergraduate/Graduate Dual Degree Proposal

Signature Page - Dual Degree Program Proposal

Dual Degree Program (Majors and Degrees): BSCS/MSAI
(Example: Accounting BBA/Accounting MAcc)

Effective Date for Dual Degree Program: Fall 2017

Dual degree program proposals must be approved by each unit involved in offering the program. If multiple departments and schools/colleges are involved, signatures from each unit must be provided. The form may be signed digitally or printed and signed.

Undergraduate Major Department

Department Name: Computer Science

Department Head Name (print): Thiab Taha

Department Head (sign & date): _____

Undergraduate Major School/College

School/College Name: Franklin College of Arts & Sciences

Dean Name (print): Alan Dorsey

Dean (sign & date): _____

Graduate Major Department

Department Name: Artificial Intelligence

Department Head Name (print): Khaled Rasheed

Department Head (sign & date): _____

Graduate Major School/College

School/College Name: Franklin College of Arts & Sciences

Dean Name (print): Alan Dorsey

Dean (sign & date): _____

Completed and signed dual degree pathway proposal forms should be submitted to the Office of Curriculum Systems at currsys@uga.edu or 319 New College.