

APPENDIX A

Postgraduate Computer Science 1+1 Articulation Pathways

M. Tech. Computer Science Engineering (VIT)

to

MS in Computer Science (UCM) or MS in Data Science and Artificial Intelligence (UCM)

Purpose: This appendix establishes 1+1 articulation pathways between VIT's Master of Technology in Computer Science Engineering and UCM's Master of Science in Computer Science or Master of Science in Data Science and Artificial Intelligence which is in continuation with the Memorandum of Understanding signed between the institutions on the 29th of January, 2026.

Students in these pathways will complete a minimum of 15 credit hours at VIT in the first year and a minimum of 15 credit hours in the second year at UCM. A total of 30 credit hours is required for UCM degrees to be conferred. VIT credits will be transferred and articulated to fulfill UCM degree requirements as specified in the tables below.

The degree conferred shall be UCM's [Master of Science in Computer Science](#) or [Master of Science in Data Science and Artificial Intelligence](#).

Articulation Pathway #1

M. Tech in CSE (VIT) to MS in CS (UCM)

VIT		Where the course will be taken	UCM	
M. Tech in Computer Science Engineering			MS in Computer Science	
Course	Credits		Course	Credits
		UCM	CS 5300 - Advanced Algorithms	3
MACSE512 Operating Systems	4	VIT	CS 5500 - Advanced Operating Systems	3
		UCM	CS 5900 - Compiler Design and Construction	3
MACSE518 Database Modeling and Design	4	VIT	CS 5600 - Advanced Database Systems	3
MACSE519 Machine Learning and Applications	4	VIT	CS 5710 Machine Learning	3
		UCM	CS 5220 - Advanced Applications Programming in Java*	3
MACSE638 Software Engineering and Modeling	3	VIT	SE 5910 - Advanced Software Engineering*	3
		UCM	CS 5610 - Introduction to Cloud Computing*	3
MACSE640 Full Stack Application and Development	4	VIT	CS 5130 - Advanced Web Applications and Services Development*	3
		UCM	CS 5160 - Advanced Applications Programming in Python*	3
TOTAL	19		TOTAL	30

Courses in **bold** are required for the degree program.

*Suggested elective courses. Student would need to select from a list of electives displayed in the MS Computer Science course catalog

^CPT can be undertaken and would replace one 3-credit elective. A student is eligible for CPT after completing a fall and spring semester at UCM



Articulation Pathway #2

M. Tech in CSE (VIT) to MS in CS in Data Science and Artificial Intelligence (UCM)

VIT		Where the course will be taken	UCM	
M.Tech.Computer Science and Engineering (Artificial Intelligence and Machine Learning)			MS in Data Science and Artificial Intelligence (data science area)	
Course	Credits		Course	Credits
MACSE518 Database Modelling and Design	4	VIT	CS 5200 - Database Theory and Applications	3
MACSE501 Data Structures and Algorithm Analysis	4	VIT	CS 5300 - Advanced Algorithms	3
		UCM	DSA 5100 - Programming Foundations for Data Science and AI	3
		UCM	DSA 5400 - Statistical Foundations for Data Science and AI	3
MACSE622 Data Engineering and Visualization	4	VIT	DSA 5200 - Advanced Data Visualization*	3
		UCM	DSA 5600 - NoSQL Database Systems*	3
MACSE630 Generative AI and Large Language Models	4	VIT	DSA 5620 - Big Data Analytics*	3
		UCM	CS 5720 Deep Learning and Neural Networks*	3
		UCM	CS 5710 - Machine Learning*	3
MACSE623 Text and Speech Analytics	3	VIT	CS 5760 Natural Language Processing*	3
TOTAL	19		TOTAL	30

Courses in bold are required for the degree program.

*Suggested elective courses. Student would need to select from a list of electives displayed in the MS Data Science and Artificial Intelligence course catalog
 ^CPT can be undertaken and would replace one 3-credit elective.
 A student is eligible for CPT after completing a fall and spring semester at UCM

Elective courses or course substitutions at UCM must be approved by the student's advisor from the course catalog in effect at the point of enrollment.

Admission: VIT students must apply for admission to UCM in accordance with Article IV of the primary MOU. Deadlines for admission processing are published on the [UCM International Student Services web page](#).

CPT and OPT: Guidance for Curricular Practical Training (CPT) and Optional Practical Training (OPT) can be requested from the UCM International Student Services office at intladmit@ucmo.edu.

Points of Contact:

At VIT:

for Admissions: VIT International Relations Office - international@vit.ac.in

for Master of Technology in Computer Science Engineering: Dr. Anil Kumar Kakelli - anilkumar.k@vit.ac.in



At UCM:

for Admissions: International Student Services - intladmit@ucmo.edu

for MS in Computer Science: Dr. Xiaodong Yue - mcsadmit@ucmo.edu

for MS in Data Science and AI: Dr. Belinda Copus - msdatascience@ucmo.edu

The appendix shall be in effect from the date of signature below:

Signed on behalf of:

University of Central Missouri



Dr. Tim Crowley
Provost/Vice President for Academic Affairs

Date: April 1, 2026

Signed on behalf of:

Vellore Institute of Technology



Dr. G. Viswanathan
Founder and Chancellor

Date: April 28th 2026

