Academic Requirements for the M Sc (AA) Program
(Effective from Autumn 2022-23)

Master of Science (Agriculture Analytics): – A two (2) year postgraduate program will be governed by these rules, subject to amendments, from time to time, as per the needs and requirements. These rules deal only with the post-admission academic activities of the program. Eligibility for admission, admission procedures etc., for the program are outside the purview of this document.

The Dean (Academic Programs)/Registrar may, from time to time, issue such instructions or directions as may be necessary to give effect to and carry out the provisions of these rules. Director, as Chairman of the Academic Council, may relax/exempt some provision(s) of therules in exceptional situations and all such cases shall be reported to the Academic Council in the immediate nextmeeting.

Important terms/expressions used in the document have been definedin the GLOSSARY at the end of thisdocument.

1. REGISTRATION

1.1 Categories of Registration:

a)   A student has to register in the resident registrationcategory only.

b)   To qualify for resident registration, the student must register for a duly approved course programme and pay the prescribed tuition and other fees, including any outstanding dues.

1.2   New entrants to the program, who are awaiting the results of the qualifying examination may be allowed 'provisional' registration. Latest by the date given in the Academic Calendar (usually about 8 weeks from the date of registration) such candidates will be required to submit, for verification, the Certificates of having passed the qualifying examination. Original certificates willbereturned to the students and a self-attested copy will be kept forrecords.

1.3 Late Registration:

a)   If for any compelling reason like illness, a student is unabletoregister on the day of registration, he/she will be allowed to register during the late registration period as specified in the Academic Calendar (which is about one week from the date of registration). Any student registering late will be required to pay the specified late registration fee.

b)   In exceptional cases, the Dean (Academic Programs) on the recommendation of the Post-Graduate Committee (PGC) may consider registration beyond the date of late registration.

1.4 Academic Advising:

a)   A student will be advised in the selection of courses by thefacultyadviser appointed by Dean (Academic Programs) in consultation with the PGC.

b)   A student may be permitted to repeat or substitute courses inwhichhe/she has obtained 'DD', 'DE' or 'F' grades. Permission torepeat/substitutea course will be governed by the guidelines laid down in section2.3.

1.5 Semester Load Requirements:

a)   For M Sc (AA) semester load will be as prescribed from time to time in the approved program course structure document.

1.6 Adding/Dropping of Courses and Withdrawal from aSemester

a)   Adding and dropping of courses is permitted, during the Add/Drop period, only if the student's request is endorsed by the instructorofthe course and the Convener PGC. The last dates of applying foraddingand dropping of courses are specified in the AcademicCalendar.

b)   A student who wishes to withdraw prior to registration for a semester must obtain a formal approval from the Dean (Academic Programs) before the prescribed last date for late registration for the concerned semester. Withdrawal after registration for a semester is permitted only on medical grounds or for other exceptional reasons and formal approval for such withdrawal must be obtained from the Dean (Academic Programs) before the date of commencement of the end-semester examination for the concerned semester. Withdrawal from a semester, either prior to registration or after registration, is permittedfor only one semester during the entire program. If a student does not register for a regular semester or does not withdraw with permission from the Dean (Academic Programs) as indicated above, his/her name is liable to be struck off from the rolls of theInstitute.

c)   A student who registers for a semester after having withdrawn in previous semester(s) can register for the available courses as prescribed in the curriculum for that particular semester subject to pre-requisites, if any.

d)   The transcript of a student who has 'withdrawn' status would show the appropriate status for the concerned semester(s). The transcriptofa student who is suspended for an academic or disciplinary reason would also show 'withdrawn' status.

e)   The maximum period for completion of the program as given in the appropriate subsection of Section 2 includes any semester in which the student has 'withdrawn' status.

2. ACADEMIC REQUIREMENTS

2.1 M Sc (AA) Program:

The total credits required in the M Sc (AA) programs will be at least 62. The actual credits will be as specified in the approved curriculum applicable to the concerned batch. The maximum permissible duration for the completion of the programs is 3 years.

The program will be jointly implemented by DAIICT, AAU and IIRS and classes will be held in first at DA-IICT, second IIRS, and third semester at AAU, while the fourth semester will be internship (industry) or research (with faculty) project. The credit transfers from AAU and IIRS to DAIICT shall be implemented.

2.2 Audit Courses:

The students are permitted to audit courses. They will be given a 'P' grade, which will be entered in their grade card if they satisfy the requirements placed by the course instructor. If they do not meet the requirements, then they will not get any grade and no entry will be made in the grade-card/transcript for thatcourse.

2.3 Grades, Semester and Cumulative PerformanceIndex:

A student is awarded a letter grade in each course he/she is registered for, indicating his/her overall performance in that course. These letter grades are assigned points on a 10-point scale as described in the table below:

Letter Grade	GradePoints	Explanation
AA	10	
AB	9	
BB	8	
BC	7	
CC	6	
CD	5	

Letter Grade	GradePoints	Explanation
DD	4	
DE	3	
F	0	Fail
I	-	Incomplete
P*	-	Pass

*For Pass/Fail and Audit Courses only.

a) If a student does not complete all the requirements for a course for a genuine reason, the instructor may award grade 'I' (Incomplete). An 'I' grade must be converted by the instructor to a regular letter grade by the last date for such conversion specified in the Academic Calendar, failing which it is automatically converted to an 'F' grade.

b) A student getting an 'F' grade in a core/elective course is considered as backlog, which the student must repeat or substitute with a relevant MOOC course (preferably on Swayam Platform) as advised by Program Coordinator of the three institutes and approved by DAIICT. On completion of the MOOC course the student has to furnish the course registration and course completion certificate along with the grades/percentage awarded for the course. A student is allowed to register at most one MOOC course in a semester and maximum two MOOC courses in the programme.

c) A student getting a 'DD' or 'DE' grade in a core/elective course may substitute it with a relevant course available in the MOOC platform complying with the above clause 2.3 (b), provided his/her CPI is less than the prescribed minimum for graduation/degree requirement.

d) In case a course is repeated or substituted, the old grade will also appear on the transcript and it will not be taken into account while computing the CPI.

3. ACADEMIC PERFORMANCE REQUIREMENT

3.1 Semester Performance Index (SPI) and Cumulative Performance Index(CPI):

The SPI is an indicator of the academic performance of a student in all the course she/she has registered during a given semester. It is computed by taking the weighted average of the grades obtained in that semester. The CPI indicates the cumulative academic performance in all the courses taken including those taken in the current semester. CPI is computed by taking the cumulative weighted average of the grades earned till that semester. The SPI and CPI is calculated upto two decimal places.

3.2 Minimum CPI requirements for graduation in theprogram:

Program	CPI for Graduation
M Sc(AA)	6.0

3.3 Academic Probation and Dismissal:

A student whose CPI falls below the minimum required for graduation at the end of any semester will be placed on Academic Probation for the next semester with written intimation. For every student placed on Academic Probation for a semester, the PGC will prescribe a specified course load in the concerned semester and may also prescribe a minimum SPI the student must attain in the semester. The PGC will keep a watch on the progress of every student placed on probation and if the performance of a student is poor so that he/she is not likely to benefit from continuing in the program any further, will recommend to the Director that he/she should leave the Institute. If a student's continuation in the program is terminated, the appropriate authority will issue the letter of termination.

4. **GLOSSARY**

Academic Probation: Academic Probation indicates that a student's academic performance is not upto the expected level. Over and above the academic consequences described in section 3.3, a student who has been placed on probation may be subjected to other restrictions related to financial support, award of medals and prizes,etc.at any time.

Cumulative Performance Index (CPI): CPI indicates the cumulative academic performance in all the courses taken including those taken in the current semester. CPI is computed by taking the cumulative weighted average of the grades earned till that semester.

Grade Points: Product of the credits and points of a letter grade awarded to the course.

Postgraduate Committee (PGC): Committee of the Institute responsible for Policy Guidelines and Implementation Strategies covering the Postgraduate Programs.

Semester: Approximately 16 weeks duration each, the first one (Autumn Semester) extending from July to November and the second (Winter Semester) from December/ January to April.

Semester Credits: The sum of credits of courses registered by the studentin asemester.

Semester Grade Points: The sum of the products of credits and points foreach course registered by a student in asemester.

Semester Performance Index (SPI): SPI is an indicator of the academic performance of a student in all the course she/she has registered during a given semester. It is computed by taking the weightedaverageof the grades obtained in thatsemester.

DA-IICT, Gandhinagar
December 2022
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M Sc (AA) –Master of Science (Agriculture Analytics) Program Structure

Curriculum structure

	Semester-I	L-T-P-C
MA611	Fundamentals of Python Programming and SQL	3-0-2-4
MA612	Fundamentals of Analytics / Statistical methods	3-0-2-4
MA613	EO Systems	3-0-2-4
MA614	Preparatory Mathematics	2-0-0-2
MA615	Basics of Agricultural Science	2-0-0-2
	Semester I Credits:13-0-6-16	
	Semester-II	
MA621	Programming for Geodata Processing	2-0-4-4
MA622	Big Data Analytics	2-0-4-4
MA623	Machine Learning	2-0-4-4
MA624	Spatial Modeling and Data Assimilation	2-0-4-4
	Semester II Credits:8-0-16-16	
	Summer-I	
MA625	Value added courses (6 credits)	0-0-12-6
	Semester-III	
MA631	Crop and Soil Analytics	3-0-2-4
MA632	Risk Analysis and Modelling	3-0-2-4
MA633	Weather and Water Analytics	3-0-2-4
MA634	Agricultural Market Analytics	3-0-2-4
	Semester III Credits:12-0-8-16	
	Semester-IV	
PC650	**Project Internship (16 credits)**	0-0-32-16

Value added course 1 Training on agriculture topics in summer semester 2 * 30hrs = 60hrs

Value added course 2 Training on technology topics in summer semester 2 * 10hrs = 20hrs

Value added course 3 Guest lecturers in second and third semesters   4 * 1hr = 4hrs

Total 84 hrs equivalent to 6 credits, maximum