Adamas University
School of Basic and Applied Sciences
Department of Mathematics

Programme Structure
of
B.Sc. (Mathematics)

Programme Code: MTH3401
Duration: 4 Years Full Time
Academic Year: 2024-25

SEMESTER I								
SL. No	**Type of Course**	**Code**	**Title of the Course**	**Contact Hours Per Week**				**Remarks**
				L	**T**	**P**	**C**	
1	CC	MTH101	Algebra	3	1	0	4	CC-1
2	CC	MTH102	Calculus	3	1	0	4	CC-2
3	MDC						3	
4	AEC	AEC101	Communicative English-I	2	1	0	3	
5	Minor						4	
6	VAC	VAC101	Environmental Education-I	2	0	0	2	
Total Semester Credit							**20**	
SEMESTER II								
SL. No	**Type of Course**	**Code**	**Title of the Course**	**Contact Hours Per Week**				**Remarks**
				L	**T**	**P**	**C**	
7	CC	MTH103	Real Analysis	3	1	0	4	CC-3
8	CC	MTH104	Ordinary Differential Equation	3	1	0	4	CC-4
9	MDC						3	
10	SEC						2	
11	VAC	VAC105	Community Engagement and Social Responsibility	1	0	1	2	
12	AEC	AEC102	Communicative English-II	2	1	0	3	
13	Minor						4	
Total Semester Credit							**22**	

SL. No	Type of Course	Code	Title of the Course	L	T	P	C	Remarks
			SEMESTER III					
14	CC	MTH201	Linear Algebra	3	1	0	4	CC-5
15	CC	MTH202	Analytical Geometry	3	1	0	4	CC-6
16	MDC						3	
17	Minor						4	
18	AEC	AEC106	Professional Communication Skills	2	1	0	3	
19	SEC						2	
20	VAC	VAC102	Human Values and Ethics	2	0	0	2	
Total Semester Credit							**21**	
			SEMESTER IV					
21	CC	MTH203	Modern Algebra	3	1	0	4	CC-7
22	CC	MTH204	Introduction to Linear Programming and Game Theory	3	1	0	4	CC-8
23	CC	MTH205	Multivariate Calculus	3	1	**0**	4	CC-9
24	SEC						2	
25	Minor						4	
26	VAC						2	
Total Semester Credit							**20**	

SEMESTER V								
SL. No	Type of Course	Code	Title of the Course	Contact Hours Per Week				Remarks
				L	T	P	C	
27	CC	MTH301	Numerical Methods	3	0	1	4	CC-10
28	CC	MTH302	Dynamics of a Particle	3	1	0	4	CC-11
29	CC	MTH303	Probability and Statistics	3	1	0	4	CC-12
30	Minor						4	
31	SEC						2	
31	INT	MTH350	Internship (Summer Project)				4	
Total Semester Credit							22	
SEMESTER VI								
SL. No	Type of Course	Code	Title of the Course	Contact Hours Per Week				Remarks
				L	T	P	C	
32	CC	MTH304	Complex Analysis	3	1	0	4	CC-13
33	CC	MTH305	Integral Transform and Partial Differential Equations	3	1	0	4	CC-14
34	CC	MTH306/ MTH307/ MTH308/ MTH306	Continuum Mechanics/ Discrete Mathematics and Graph Theory/ Applied Statistics/ Continuum Mechanics				4	CC-15
35	Minor						4	
36	SEC						2	
37	Project	MTH351	Project				4	
Total Semester Credit							22	
Total Credit After 3rd Year							127	

SEMESTER VII								
SL. No	Type of Course	Code	Title of the Course	Contact Hours Per Week				Remarks
				L	T	P	C	
38	CC	MTH401	Mathematical Modelling	3	1	0	4	CC-16
39	CC	MTH402/ MTH403/ MTH404/ MTH402	Fluid Dynamics/ Advanced Abstract Algebra/ Fuzzy Sets and its Applications/ Fluid Dynamics				4	CC-17
40	CC	MTH405/ MTH406/ MTH405/ MTH407	Operations Research/ Topology and Metric Space/ Operations Research/ Classical Mechanics				4	CC-18
41	CC (For With research)	MTH450	Research Methodology	3	1	0	4	CC-19 (Research)
42	CC (For Without research)	MTH404/ MTH404/ MTH451/ MTH452	Fuzzy Sets and its Applications/ Fuzzy Sets and its Applications/ Stochastic Methods in Industry/ Physical Oceanography				4	CC-19(without Research)
43	Minor						4	
Total Semester Credit							20	

SL. No	Type of Course	Code	Title of the Course	L	T	P	C	Remarks
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			SEMESTER VIII					
SL. No	**Type of Course**	**Code**	**Title of the Course**	**Contact Hours Per Week**				**Remarks**
				L	**T**	**P**	**C**	
44	CC	MTH408	Computational Matrix Theory	3	0	1	4	CC-20
45	CC (For Without research)	MTH453/ MTH454/ MTH455/ MTH456	Mathematical Modelling in Bio-Sciences/ Measure Theory/ Optimization / Ocean Dynamics and Modelling				4	CC-21 (without Research)
46	CC (For Without Research)	MTH457/ MTH458/ MTH459/ MTH460	Advanced Differential Equations/ Functional Analysis/ Mathematical Finance/ Computational Fluid Dynamics				4	CC-22(without Research)
47	Minor						4	
48	Minor (For without research)						4	
49	Dissertation	MTH499	Project/Dissertation				12	
Total Semester Credit							**20**	
Total Credit After 4th Year							**167**	

*NOTE: With research is only allowed for Students *who secure 75% marks and above in the first six semesters*