

DEPARTMENT OF MATHEMATICS
PROGRAMME PROFILE B.Sc. (Mathematics)

Semester	Part	Category	Course code	Course Title	Previous course code	Contact Hrs/ week	Credit
							Min/Max
I	I	Language	UTAL105/ UTAL106/ UHIL102/ UFRL102	Basic Tamil-I/Advanced Tamil-I/Hindi-I / French-I	UTAL103/ UTAL104/ UHIL101/ UFRL101	4	2/3
	II	English	UENL107/ UENL108	General English-I/ Advanced English-I	UENL106	5	3/4
	III	Core I	UMAM107	Fundamentals of Mathematics	UMAM103	2	1
	III	Core II	UMAM104	Differential Calculus	-	5	4
	III	Core III	UMAM106	Analytical Solid Geometry	UMAM105	6	5
	III	Allied	UMAA111	Mathematical Statistics	-	6	5
	IV	Value Education				2	1
TOTAL						30	21/23
II	I	Language	UTAL205/ UTAL206/ UHIL202/ UFRL202	Basic Tamil II/ Advanced Tamil-II/ Hindi-II /French-II	UTAL203/ UTAL204/ UHIL201/ UFRL201	4	2/3
	II	English	UENL207/ UENL208	General English II/ Advanced English II	--/ UENL 206	5	3/4
	III	Core IV	UMAM204	Integral Calculus	-	5	5
	III	Core V	UMAM205	Graph Theory	UMAM402	5	4
	III	Core VI	UMAM206	Discrete Mathematics	UMAM606	5	4
	IV	Non Major Elective				4	2
	IV	Soft Skill				2	1
V	Extension Programme/ Physical Education				-	1/2	
TOTAL						30	22/25
III	I	Language	UTAL305/ UTAL306/ UHIL302/ UFRL302	Basic Tamil III/ Advanced Tamil-III/ Hindi-III /French-III	UTAL303/ UTAL304/ UHIL301/ UFRL301	4	2/3
	II	English	UENL307/ UENL308	Basic English III/ Advanced English III	UENL306	5	3/4
	III	Core VII	UMAM306	Differential Equation	UMAM302/ UMAM301	5	4
	III	Core VIII	UMAM307	Introduction to Probability Theory	-	5	5
	III	Allied	UCSA303	Mathematical Programming in C	-	3	3

	III	Allied Practical	UCSR305	Mathematical Programming in C Practical	-	3	2
	IV	Online Course (NPTEL/SP)	UMAV381			3	1/2
	IV	Value Education				2	1
TOTAL						30	21/24
IV	I	Language	UTAL405/ UTAL406/ UHIL402/ UFRL402	Basic Tamil IV/ Advanced Tamil-IV/ Hindi-IV/French-IV	UTAL403/ UTAL404/ UHIL401/ UFRL401	4	2/3
	II	English	UENL407/ UENL408	Basic English IV/ Advanced English IV	UENL406	5	3/4
	III	Core IX	UMAM405	Applications of Transforms	-	4	3
	III	Core X	UMAM406	Mechanics	UMAM401	4	4
	III	Core XI	UMAM404	Mathematical modeling	-	4	4
	III	Core XVI	UMAP501 / UMAR511	Project/ R Programming	-	2	-
	III	Allied	UPHA402	Electronics for Mathematics	-	3	3
		Allied Practical	UPHR402	Electronics for Mathematics Practical	-	2	2
IV	Soft Skill				2	1	
V	Extension programme/ Physical Education				-	-/2	
TOTAL						30	22/26
V	III	Core XII	UMAM507	Modern Algebra	UMAM501	6	5
	III	Core XIII	UMAM512	Real Analysis I	UMAM508	6	5
	III	Core XIV	UMAM506	Number Theory	UMAM502	6	5
	III	Core XV	UMAM510	Numerical Methods	-	6	5
	III	Core XVI	UMAP501/ UMAR511	Project/ R Programming	-	4	4/5
	IV	Value Education				2	1
TOTAL						30	25/26
VI	III	Core XVII	UMAM614	Linear Algebra	UMAM610	5	5
	III	Core XVIII	UMAM615	Real Analysis II	UMAM611	6	6
	III	Core XIX	UMAM602	Complex Analysis	UMAM509	6	6
	III	Core XX	UMAM613	Operations Research	UMAM608	6	6
	III	Major Elective	UMAO607	Mathematics in Space Science	UMAM612	5	4
			UMAO606	Mathematics for Construction Craft	-		
	III	Comprehensive Viva	UMAM601			-	1
	IV	Soft Skill				2	1
V	Extension programme/ Physical Education				-	-/2	
TOTAL						30	29/31
GRAND TOTAL						180	140/155

COURSES OFFERED TO OTHER DEPARTMENTS-UG ALLIED

Class & Major	Semester	Category	Course Code	Course Title	Previous course code	Contact Hrs/ week	Credit
							Min/ Max
I B Com & I B Com (CA)	I	Allied	UMAA112	Business Mathematics	-	5	4
I B.Sc PHY			UMAA114/ UMAA312	Allied Mathematics I	UMAA106	5	5
I BCA			UMAA110	Mathematical Methods I	-	5	4
I B.Sc (CS)			UMAA113	Statistical Methods	-	6	4
I B.Sc (CS)	II		UMAA218	Mathematics for Computer Science	-	6	4
II BCA			UMAA216	Mathematical Methods II		5	4
I B.Sc PHY			UMAA222	Allied Mathematics II	UMAA212	5	5
II B.ScChem	III		UMAA312/ UMAA114	Allied Mathematics I	UMAA310	5	5
II B.Sc BIO			UMAA305	Bio-Statistics	-	5	4
II BBA/ II B.Com/ II B.Com CA			UMAA301	Business Statistics	UMAA211/ UMAA403/ UMAA107	5	4
II B.ScChem	IV		UMAA406	Integral Calculus, Laplace Transform And Ordinary Differential Equations	-	5	5
II BBA			UMAA410	Quantitative techniques for Business	UMAA505	5	4

NON-MAJOR ELECTIVE

Semester	Part	Category	Course Code	Course Title	Previous course code	Contact Hrs/ week	Credit
II	IV	Non Major Elective	UMAE204	Basic Mathematics for Science	-	4	2
			UMAE202	Mathematics for Business and Decision Making	-	4	2
			UMAE206	Numerical Methods using C++	UIDE302/ UMAE302	4	2
			UMAE209	Operations Research for Managers	UMAE306/ UMAE402	4	2
			UMAE207	Statistical Data Analysis through SPSS	UMAA501/ UMAE305	4	2
			UMAE208	Applied Mathematics	UMAE309/ UMAE502	4	2

EXTRA CREDIT EARNING PROVISION

Semester	Part	Category	Course code	Course Title	Contact Hrs/ week	Credit	
						Min	Max
II	III	Self Study paper	UMAI201	Summer Internship	-	-	1
IV	III	Self Study paper	UMAI401	Summer Internship	-	-	1
VI	III	Self Study paper	UMAS601 UMAS602 UMAS603 UMAS604	Fourier Transforms Simulation Number Theory Project	2	-	2

EXPERIENTIAL LEARNING (Mandatory)

Course Mapping				Collaborating Agency – MSME		
Semester	Course code	Course Title	Assessment	Course Title	Hours/ Days/ Month	Mode of Evaluation
I	UMAA111	Mathematical Statistics	Component IV	Applied Statistics Certification	2 Days	Reflection

SKILL ORIENTATION PROGRAMME (Only for Interested students) – Extra Credit Earning Provision

Sem	Category	Course Code	Course Title	Collaborating Agency	Hours/ Days/ Month	Mode of Evaluation	Credits (Min/Max)
II	Core	UMAT201	Statistics Process Control	MSME	4 Days	Reflection	1

PROGRAMME PROFILE M.Sc. (Mathematics)

Semester	Category	Course Code	Course Title	Contact Hrs/ Week	Credit	
					Mini	Max
I	Core I	PMAM107	Abstract Algebra	6	4	4
	Core II	PMAM102	Real Analysis	6	4	4
	Core III	PMAM103	Ordinary Differential Equations	6	4	4
	Core IV	PMAM105	Calculus Of Variations And Integral Equations	6	4	4
	Core V	PMAM106/ PMAM407	Fuzzy Analysis	6	4	4
TOTAL				30	20	20
II	Core VI	PMAM209	Linear Algebra	5	4	4
	Core VII	PMAM202	Measure and Integration	5	4	4
	Core VII	PMAM206	Partial Differential Equations	5	4	4
	Core IX	PMAM204	Classical Mechanics	5	4	4
	Core X	PMAM208	Operations Research	5	4	4
	Non Major Elective			5	4	4
	Service Learning	PMA201/ PMA202	Mathematics for High School Students \Elementary Mathematics for Higher Secondary Students	-	1	1
TOTAL				30	25	25
III	Core XI	PMAM305	Complex Analysis	5	4	4
	Core XII	PMAM310	Fluid Dynamics	6	4	4
	Core XIII	PMAM311	Topology	6	4	4
	Core XIIV	PMAM406 /PMAM313	Mathematical Statistics	6	5	5
	Core XV	PMAI312	Number Theory and Cryptography	5	4	4
	Core XX	PMA401	Project	2	-	-
TOTAL				30	20	20
IV	Core XVI	PMAM405	Functional Analysis	6	5	5
	Core XVII	PMAM309/PMA M408	Stochastic process	6	4	4
	Core XVIII	PMAM407	Numerical Analysis	7	5	5
	Core XIX	PMAM403	Differential Geometry	6	5	5
	Core XX	PMA401	Project	4	5	5
Library				1	-	-
TOTAL				30	25	25
GRAND TOTAL				120	90	90

PROGRAMMES OFFERED TO OTHER DEPARTMENTS – PG

Semester	Category	Course Code	Course Title	Contact Hrs/ Week	Credit	
					Mini	Max
I	Core III	PCAM103	Mathematical Foundation	4	4	4
		PCSM108	Theoretical foundations for computers	6	4	4
		PCAM504	Operations Research	4	4	4
	Non Major Elective	PMAE101	LaTeX and MaTLab	3	4	4
			Practical	LaTeX and MaTLab		
	Non Major Elective	PMAE102	Operations Research	5	4	4
II	Core VI	PCAM206	Applied Statistics	5	4	5
	Non Major Elective	PMAE202	NET/SET/ Competitive Exam	5	5	5
		PMAE203	Discrete mathematics	5	4	4

EXTRA CREDIT EARNING PROVISION

Semester	Category	Course code	Course Title	Hrs/ week	Credit	
					Min	Max
III	Self study paper	PMAE301/ PMAE302	Difference Equation Combinatorial Analysis	2	-	1