

## Templates for programs Aerospace Engineering (AE)

### Template for BT Program in Aerospace Engineering

Semester 1 (Group-A/B)	Semester 2 (Group-A/B)	Semester 3	Semester 4	Semester 5	Semester 6	Semester	Semester 8
SCHEME-1 (9) ELC111/ELC112/ELC113	ETH111 (3)	SCHEME-2 EME (9-11)	SCHEME-3 HSS-I (9-11)	SCHEME* HSS-II (9)	SCHEME* HSS-II (9)	DE-1 (9)	SCHEME* HSS-II (9)
MTH 111 (6)	MTH 113 (6)	ESO202 (11)	ESC201 (14)	AE311 (9)	AE341 (11)	AE463 (3)	AE462 (4)
MTH 112 (6)	MTH 114 (6)	ESO204 (11)	ESO201(11)	AE321 (9)		AE461 (7)	AE421 (3)
PHY 115 (11)	PHY 112 (11)	TA 211 (3)§	AE211 (9)		AE351 (3)	AE451 (3)	OE-5 (9)
PHY 111 (3)	CHM 111 (3)	AE201M (5)	AE233M (5)	AE333 (9)	AE322 (9)	DE-2 (9)	UGP-2 /DE-3 (9)
TA 111 (9)	ESC 111 (7)	MSO202M (6)	AE252M (4)	OE-1 (9)	AE334 (9)	UGP-1 (5)	UGP-3 /OE-6 (9)
CHM 112 (4)	ESC 112 (7)	MSO203M (6)	TA212 (3) §	OE-2 (9)		OE-3 (9)	
CHM 113 (4)	LIF111 (6)	AE209 (8)			AE 312 (9)	OE-4 (9)	
PE111 (3)	PE112 (3)						
55	52	59-61	55-57	54	50	54	43

#### Remarks:

- At least 9 credits of DE must be taken from Basket-A as below.
- Basket-A: AE641 [9], AE662 [9], AE673 [9], AE747 [9], and AE777 [9]

Credit Table for BT Program in Aerospace Engineering		
Course type	Allowable Credit range	Credit in the department template
Institute Core (IC)	112	112
E/SO	18-45	51*
Department requirements	144-179	151 (124 DC + 27 DE)
Open electives (OE)	51-57	54
SCHEME	54-58	54-58
Total for 4-year BT/BS	391-420	422-426*

Template for the BTH program in Aerospace Engineering

Template for 3 <sup>rd</sup> to 8 <sup>th</sup> semester for BTH program in Aerospace Engineering					
Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
SCHEME-2 EME (9-11)	SCHEME-3 HSS-I (9-11)	SCHEME* HSS-II (9)	SCHEME* HSS-II (9)	DE-1 (9)	SCHEME* HSS-II (9)
ESO202 (11)	ESC201 (14)	AE311 (9)	AE341 (11)	AE463 (3)	AE462 (4)
ESO204 (11)	ESO201(11)	AE321 (9)		AE461 (7)	AE421 (3)
TA 211 (3)	AE211 (9)		AE351 (3)	AE451 (3)	UGP-2 (9)
AE201M (5)		AE333 (9)	AE322 (9)	DE-2 (9)	OE-4 (9)
MSO202M (6)	AE233M (5)	OE-1 (9)	AE334 (9)	UGP-1 (5)	OE-5 (9)
MSO203M (6)	AE252M (4)	OE-2 (9)	DEH-1	OE-3 (9)	UGP-3 /OE-6 (9)
AE209 (8)	TA212 (3)		AE 312 (9)	DEH-2	DEH-3 (9)
59-61	55-57	54	59	54	61

For BTH, students should take UGP- 2 and 27 credits of DEH courses which are DEs at 6 or 7 level.

CPI criteria for BTH: 8.0

Template for the BTM program in Aerospace Engineering

Template for 3 <sup>rd</sup> to 8 <sup>th</sup> semester for BTM program in Aerospace Engineering					
Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
SCHEME-2 EME (9-11)	SCHEME-3 HSS-I (9-11)	SCHEME* HSS- II (9)	SCHEME* HSS- II (9)	MTB-1 (9)	SCHEME* HSS-II (9)
ESO202 (11)	ESC201 (14)	AE311 (9)	AE341 (11)	AE463 (3)	AE462 (4)
ESO204 (11)	ESO201(11)	AE321 (9)		AE461 (7)	AE421 (3)
TA 211 (3)	AE211 (9)		AE351 (3)	AE451 (3)	MTB-4 (9)
AE201M (5)		AE333 (9)	AE322 (9)	MTB-2 (9)	MTB-5 (9)
MSO202M (6)	AE233M (5)	OE-1 (9)	AE334 (9)	UGP-1 (5)	MTB-6 (9)
MSO203M (6)	AE252M (4)	OE-2 (9)		MTB-3 (9)	
AE209 (8)	TA212 (3)		AE 312 (9)	OE-3 (9)	
59-61	55-57	54	50	54	43

Template for five year dual-degree program in Aerospace Engineering

Template for 3 <sup>rd</sup> to 10 <sup>th</sup> semester of dual-degree program in Aerospace Engineering (Category-A)							
Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10
SCHEME-2 EME (9-11)	SCHEME-3 HSS-I (9-11)	SCHEME* HSS-II (9)	SCHEME* HSS-II (9)	DE-1 (9)	SCHEME* HSS-II (9)	Thesis (36)	Thesis (36)
ESO202 (11)	ESC201A (14)	AE311 (9)	AE341 (11)	AE463 (3)	AE462 (4)		
ESO204 (11)	ESO201 (11)	AE321 (9)		AE461 (7)	AE421 (3)		
TA 211 (3)	AE211 (9)		AE351 (3)	AE451 (3)	OE-3 (9)		
AE201M (5)		AE333 (9)	AE322 (9)	DE-2 (9)	UGP-2 /DE- 3 (9)		
MSO202M (6)	AE233M (5)	OE-1 (9)	AE334 (9)	PG-1 (9)	PG-4 (9)		
MSO203M (6)	AE252M (4)	OE-2 (9)		PG-2 (9)	PG-5 (9)		
AE209(8)	TA212 (3)		AE 312 (9)	PG-3 (9)	PG-6 (9)		
59-61	55-57	54	50	58	61	36	36

Minimum Credit Requirement in MT part:

- PG Component: 54 credits
- Thesis Component: 72 credits

Remarks:

- UGP-1 and up to 27 OE credits from the BT minimum requirements may be used to fulfil requirements of the PG course component of the MT part.
- 18 credits of PG DE courses may be substituted from the PG course basket (below) for Category-A Dual Degree students.

PG course basket:

ME641, ME642, ME671, ME674, ME685, ME723, ME728, ME763, EE650, EE653, EE654, EE705/EE651; AE674/CHE614; AE617/CHE614; AE621/ME647; AE614/ME631; AE604/ME630; AE622/ME630; AE605/ME634; AE615/ME634; AE696/ME649;

AE653/ME617; AE663/ME643; AE754/ME745 (/ means any one of the two courses only)

Template for 7 <sup>th</sup> to 10 <sup>th</sup> semester of dual-degree program in Aerospace Engineering (Category B)			
Semester 7	Semester 8	Semester 9	Semester 10
AE601 (9)	PG-3 (9)	Thesis (36)	Thesis (36)
PG-1 (9)	PG-4 (9)	PG-6 (9)	
PG-2 (9)	PG-5 (9)		
27	27	45	36

Minimum Credit Requirement in MT part:

- PG Component: 63 credits
- Thesis Component: 72 credits

Remarks:

Up to 36 OE credits may be waived from the parent department's BT/BS graduation requirements to fulfil the PG requirements of Dual Degree.

Template for double major: second major in Aerospace Engineering

Double Major – Aerospace Engineering	
Pre-Requisites (33)	
ESO201(11)*	
ESO202(11)*	
ESO204(11)*	
AE Mandatory Courses (85)	
Odd Semester (45)	Even Semester (40)
AE209(8)*	AE211 (9)
AE311(9)	AE252 (4)
AE321(9)	AE341 (11)
AE333(9)	AE351 (3)
AE451(3)	AE322 (9)
AE461(7)	AE462 (4)

Remarks:

- \*Other equivalent courses may be considered in consultation with AE DUGC
- Up to 36 OE credits may be waived from the parent department BT/BS graduation requirements to fulfil requirements of Double Major
- Pre-requisite courses are mandatory to complete DM

Minors in Aerospace Engineering

Minor – Aerospace Engineering	
AE Compulsory Course	
AE201M (5)	
Any THREE:	Pre-Requisites
AE211 (9)	ESO204 OR ME231
AE321 (9)	NONE
AE333 (9)	NONE
AE341 (11)	AE311
32-34	