

AEROSPACE ENGINEERING DEPARTMENT
TIME TABLE FOR 2021-2022 – 1st SEMESTER (As on 13.08.21)

| | 8-8:50 | 9-9:50 | 10-10:50 | 11-11:50 | 12-12:50 | 1:15-2:00 | 2-2:50 | 3-3:50 | 4-4:50 | 5:10-6:00 | 6-7 |
|-----|-------------------|--|--------------------------|--|--|---------------------|----------------------------------|---------------------------|---|--|---------------------|
| MON | 311 610 481 | MSO202a MSO203b 602----- | --> <-- <-- <-- | ESO204 -----663 -----698 -----688 | 201a 777----- 601----- | --> --> | 451----- 691----- 720----- | ----- --> --> <-- | -----> ----- -----670 -----674 | ESO209 | |
| TUE | 441a | 311 610 | | | | | 674----- 670----- 361----- | -----> <-- -----> | 321 -----686 -----> | 331 ESO209 | 481 |
| WED | 441a | MSO202a MSO203b 647----- 667----- | --> --> <-- | ESO204 -----703 | 201a 664----- 649----- 704----- | --> --> --> | 331 698----- | -----> | 321 -----> | 614----- 684----- ESO209 702----- | --> --> --> |
| THU | 441a | MSO202a MSO203b 602----- | <-- --> <-- <-- | ESO204 -----663 -----698 -----688 | 777----- 601----- | --> --> | 461----- 691----- 720----- | -----> --> <-- --> | -----686 | | |
| FRI | 610 311 481 | MSO202a MSO203b 647----- 667----- | --> --> <-- | ESO204 -----703 | 201a 704----- 664----- 649----- | --> --> --> | 331 | 461 | 321(Shfited to Saturday) | 684----- 614----- 702----- | --> --> --> |

Rooms: To be announced

201(DD/Abhis), 311(RKM), 321(AKG), 331(GMK/PM), 361(DD/MS), 441(MS), 461(SS), 481(SM), MSO202a(Soumya Ranjan Nanda), MSO203b(N), ESO201[(AVS(T)/2-Student(T)], ESO202[02-Student(T)], ESO204[ACM(I)/KS(T)/04-Student(T)], ESO209[GMK(T)/RPK(T)], TA101[03-Student(T)]

Note : Please read I as instructor and T as tutor.

601(AK/PM), 602(DKG), 610(AKP), 614(N), 647(RPK), 649(DKG), 663(AD), 664(RR), 670(TM), 667(VA), 674(AS), 684(PDM), 686(Abhis), 688(PC), 691(MK), 698(KP), 702(PC/AD), 703(TM/AS), 704(RK), 720(MIS), 777(AT)

-----**ABBREVIATION**-----

AKG(A.K. Ghosh), AT(Ashish Tewari), AK(A. Kushari), Abhish(Abhishek), AD(Ashoke De), ACM(Alakesh C Mandal), Arnab Samanta(AS), AVS(Ajay Vikram Singh), AKP(Arun Kumar Perumal), CSU(C.S. Upadhyay), DD(Debopam Das), DPM(D.P. Mishra), DKG(Dipak Kumar Giri), GMK(G.M. Kamath), KP(Kamal Poddar), KS(Sanjay Kumar), MIS(Mohd. Ibrahim Sugarno), MK(Mangal Kothari), MS(SatheshMariappan), (N)Navrose, PDM(P D Mangalgi), PM(P.M. Mohite), PC(Pritam Chakraborty), RK(Rajesh Kitey), RKM(Rakesh Kumar Mathpal), RPK(Raghavendra P Kukillya), RR(Rajesh Ranjan), SM(S. Mittal), SS(SubrahmanyamSaderla), TanmoyMukhopadhyay(TM), VA(Vaibhav Arghode),

ONE AND A HALF HOUR CLASS TO BE READ AS FOLLOWS :

09:00-10:15, 10:35-11:50, 12:00-13:15, 14:00-15:15, 14:35-15:50, 15:35-16:50, 17:10-18:25

Compulsory courses for new M.Tech Students :-

Non-Aero, Non-IIT - AE601; AE602; AE610; AE647; AE663;AE664; AE670; AE688

Aero, Non-IIT – AE602; AE610;AE647; AE663;AE664; AE670; AE688

Department of Aerospace Engineering
Schedule of 2021-22 1st Semester Courses

| UG Open Electives (OE)/Compulsory [List All Courses (Including D, DE and PG Courses) Declared as Open Elective] | | | | | |
|--|-------------------|------------------------|---|---|-----------------------------|
| S. No. | Course No. | L-T-P-A (Units) | Course Title | Instructor | Slot |
| 1 | AE201A | 3-0-0-0 (05) | Introduction to Aerospace Engineering | Dr. Abhishek(I-1)/ Dr. Debopam Das(I-2) | |
| 2 | AE311 | 3-0-0-0 (09) | Aerodynamics-II/Compressible Aerodynamics | Dr. Rakesh Kumar | |
| 3 | AE321A | 3-0-0-0 (09) | Fight Mechanics-I | Dr. A.K. Ghosh | |
| 4 | AE331A | 3-0-0-0 (09) | Introduction to Aerospace Structures | Dr. G.M. Kamath(I-1)/ Dr.P.M. Mohite(I-2) | |
| 5 | AE361A | 0-0-3-0(03) | Aero-Modelling Design and Fabrication | Dr. Debopam Das(I-1)/ Dr. Sathesh MariappanII-2) | Thursday: 2-5PM (LAB) |
| 6 | AE441A | 3-0-0-0 (05) | Rocket Propulsion | Dr. S. Mariappan | |
| 7 | AE451 | 0-0-3-2 (05) | Experiments in Aerospace Engineering-III | Dr. R. Kitey(I-1)/ Dr. Rakesh Kumar(I-2) Dr. A.V. Singh(I-3)/ | |
| 8 | AE461A | 1-0-2-2 (07) | Aircraft Design-I | Dr. S. Saderla | |
| 9 | AE471 | 0-0-9-0 (09) | B. Tech Project | DUGC | |
| 10 | AE481 | 3-0-0-0(09) | Boundary Layer Theory | Dr. Sanjay Mittal | |

Note:

1. AE401 has been already offered in 2020-21 second semester in place of AE361A.
2. AE361A needs to be offered in 2021-22 first Semester.
3. Two more courses (1. Continuum Mechanics: Pritam Chakraborty AND Ashoke De and 2. Computational Methods: Tanmoy Mukhopadhyay AND Arnab Samanta)will be announced soon which are going to be offered in 2021-22 first semester.

| UG Minors [List All Courses (including D, DE, OE and PG courses) Declared as Minor] | | | | | |
|--|-------------------|------------------------|---------------------------------------|--|-------------|
| S. No. | Course No. | L-T-P-A (Units) | Course Title | Instructor | Slot |
| 1 | AE201A | 3-0-0-0 (05) | Introduction to Aerospace Engineering | Dr. Abhishek(I-1)/ Dr. Debopam Das(I-2) | |
| 2 | AE331A | 3-0-0-0 (09) | Introduction to Aerospace Structures | Dr. G.M. Kamath | |
| 3 | AE321A | 3-0-0-0 (09) | Fight Mechanics-I | Dr. A.K. Ghosh | |

Department of Aerospace Engineering
Schedule of 2021-22 1st Semester Courses

PG Slots

| S. No. | Course No. | L-T-P-A | Course Title | Instructor | Slot/Venue |
|--------|------------|---------|--|--|--------------------------------------|
| | | (Units) | | | |
| 1 | AE614A | | Viscous Flows | Dr. Navrose | PG-9 |
| 2 | AE663A | | Fundamental of Combustion | Dr. Ashoke De | PG-3 |
| 3 | AE670A | | Aerospace Structural Analysis-I | Dr. Tanmoy Mukhopadhyay | PG-14 |
| 4 | AE674A | | Advanced Hydrodynamic Instability | Dr. Arnab Samanta | PG-14 |
| 5 | AE684A | | Aircraft Materials and Processes | Dr. P.D. Mangalgiri | PG-9 |
| 6 | AE686A | | Helicopter Theory: Dynamics and Aeroelasticity | Dr. Abhishek | PG-15 |
| 7 | AE688A | | Dynamics and Vibration | Dr. P. Chakraborty | PG-3 |
| 8 | AE691A | | Optimal Control and Reinforcement Learning | Dr. M. Kothari | PG-13 |
| 9 | AE698A | | Introduction to Virtual Instrumentation | Dr. Kamal Poddar | PG-3 Wednesday: 1400-1750(LAB) |
| 10 | AE702 | | Continuum Mechanics | Dr. Pritam(I-1)/ Dr. Ashoke De(I-2) | PG-9 |
| 11 | AE720A | | Hypersonic Flow | Dr. Ibrahim | PG-13 |

Departmental Electives (DE/DC)

| S. No. | Course No. | L-T-P-A | Course Title | Instructor | Slot/Venue |
|--------|------------|---------|---------------------------------------|--|------------|
| | | (Units) | | | |
| 12 | AE601A | | Introduction to Aerospace Engineering | Dr. A. Kushari(I-1)/ Dr. P.M. Mohite(I-2) | DE-3 |
| 13 | AE602A | | Mathematics for Aerospace Engineers | Dr. D.K. Giri | DE-1 |
| 14 | AE777A | | Optimal Space Flight Control | Dr. A. Tewari | DE-3 |

Open Electives (OE)

| S. No. | Course No. | L-T-P-A | Course Title | Instructor | Slot/Venue |
|--------|------------|---------|---|---|------------|
| | | (Units) | | | |
| 15 | AE610A | | Aerodynamics-I | Dr. Arun Kumar Perumal | OE-7 |
| 16 | AE647A | | Flight Dynamics | Dr. R.P. Kukillaya | OE-2 |
| 17 | AE649A | | Automatic Control of Aircraft, Rockets and Spacecraft | Dr. D.K. Giri | OE-8 |
| 18 | AE664A | | Applied Compressible Flows | Dr. Rajesh Ranjan | OE-8 |
| 19 | AE667A | | Nanoparticle Aerosol Dynamics | Dr. V. Arghode | OE-2 |
| 20 | AE703 | | Computational Methods | Dr. Arnab Samanta(I-1)/ Dr. Tanmoy Mukhopadhyay(I-2) | OE-3 |
| 21 | AE704 | | Deformation and fracture | Dr. R. Kitey | OE-3 |

Instructor/Tutor list for 2021-22 first semester

| | | | | | |
|---|---------|--|------------------------------------|--|--|
| 1 | ESO201 | | Thermodynamics | 03 Tutors Dr. Ajay Vikram Singh(T) Bharat Bhatia (17101263)(T)/ Imran Rasheed (17101265) (T)/ | |
| 2 | ESO202 | | Mechanics of Solids | 02 Tutors Madhusudan U (18101265) (T)/ Spandan Bandyopadhyaya (17101274)(T) | |
| 3 | ESO204 | | Fluid Mechanics and Rate Processes | Instructor + 07Tutors Dr. Alakesh Chandra Mandal(I)/ Dr. Sanjay Kumar(T)/ Izhar Hussain Khan (17101266)(T)/ Shweta Singh (17201269)(T)/ Soumarup Bhattacharyya (16101270)(T)/ Mohamed Aniffa. S (17101268)(T)/ Ragavendiran (15101271)(T)/ Sidyant Kumar (15201264)(T) | |
| 4 | ESO209 | | Dynamics | 02 Tutors Dr. G.M. Kamath(T) Dr. R.P. Kukillaya(T) | |
| 5 | MSO202a | | Complex Analysis | 01 Tutor Dr. Soumya Ranjan Nanda | |
| 6 | MSO203b | | Partial Differential Equations | 01 Tutor Dr. Navrose | |
| 7 | TA101 | | Engineering Graphics | 03 Tutors Nazim Khan (17101269)(T)/ Sanjay Singh Tomar (17201266)(T)/ Shalvi Singh (17101272) (T) | |