

### institute of higher education

TITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)

(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4\* July 2002)



#### DEPARTMENT OF AERONAUTICAL ENGINEERING

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173, Agaram Road, Selaiyur, Tambaram, Chennai - 600 073. Tamil Nadu.

Dr. M.Sundararaj M.E., Ph.D Head

11/02/2019

F.No.Aero/Events-1.1/Value Added Course/2019

#### **CIRCULAR**

Department of Aeronautical Engineering is organising a Value Added Course on 'Jet and Rocket Propulsion' to be delivered by the eminent Industry expert and speaker, Mr. Arun, Manager, Orient Flight School Private Limited on 12/02/2019 for the students of B.Tech (Aeronautical & Aerospace Engineering). All the students are hereby instructed to be available for the said course.



HOD-Aero

Dr. M. SUNDARARAJ, M.E., Ph.D.,

Department of Aeronautical Engineering
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073. INDIA



#### **Department of Aeronautical Engineering**

Value Added Course
Course on Jet and Rocket Propulsion

#### Objective:

The objective of the course is to impart knowledge about rocket propulsion and fundamental aspects of propulsion namely solid, liquid and hybrid rocket engines

Course Co-ordinator: Mr.M.Syedhaleem

**COURSE LAYOUT** 

SNO	Date	Course Content	Duration	Instructor
		Jet Engine Cycle Analysis and		Mr.Arun, Manager
1	12/02/2019 (FN)	Performance; Cycle Design	3 Hours	,Orient Flight school
		Inlet and Nozzle Analysis, Design and		
1	12/02/2010 (AND	Performance	2.11	Mr.Arun, Manager
2	12/02/2019 (AN)	A Different and The Inc.	3 Hours	,Orient Flight school
	16/00/0010 (77.7)	A Brief study on the Thermodynamic		Mr.Arun, Manager
3	16/02/2019 (FN)	Cycle Analysis: i. Carnot ii.Brayton	3 Hours	,Orient Flight school
		Chemical Rocket Cycle Analysis(		
		Characteristic velocity and thrust		Mr.Arun, Manager
4	16/02/2019 (AN)	coefficient)	3 Hours	,Orient Flight school
		Principles of Rocket Propulsion: Thrust,		Mr.Arun, Manager
5	17/02/2019 (FN)	Specific Impulse.	3 Hours	,Orient Flight school
		Launch Vehicle Dynamics:Range,		
		Vertical velocity, Multistage rockets,		Mr.Arun, Manager
6	17/02/2019 (AN)	Orbits and Space flight	3 Hours	,Orient Flight school
		Performance of ideal Rocket Engine,		Mr.Arun, Manager
7	23/02/2019 (FN)	Combustion in Rocket motors.	3 Hours	,Orient Flight school
		Electric Propulsion: Electric thrusters,		Mr.Arun, Manager
8	23/02/2019 (AN)	Electromagnetic Thrusters	3 Hours	,Orient Flight school
		Electric and In-Space Propulsion i.		Mr.Arun, Manager
9	02/03/2019 (FN)	Power limitations	3 Hours	,Orient Flight school
		Characterize the performance and		
		operating/design constraints for inlets,		Mr.Arun, Manager
10	02/03/2019 (AN)	compressors, turbines and nozzles	3 Hours	,Orient Flight school



BOOKS AND REFERENCES		
1	Mechanics and Thermodynamics of propulsion: P.Hill and C.Peterson	
2	Propulsion Techniques: P.J.Turchi, Ed.; AIAA Book Series	
3	Rocket Propulsion Elements: G.P.Sutton and D.M.Ross	





## Participant Feedback Form (On course completion)

Date UIT AE as I					
Coolse		Propulsion			
Student ID (optional)	Student ID (optional)				
a) Helpful and knowledge	eable staff:				
Very satisfied	Satisfied	Somewhat satisfied	Not satisfied		
b) Staff friendliness:  Very satisfied	Satisfied	Somewhat satisfied	Not satisfied		
C) Ease of registration:  Very satisfied	Satisfied	Somewhat satisfied	Not satisfied		
2. Is there anything we can improve with our registration process?					
B. The Training Faci	ility				
3. How satisfied were yo	ou with the training facilit	y on the follow			
a) Cleanliness of facility  Very satisfied	Satisfied	Somewhat satisfied	Not satisfied		
b) Comfort of training ro	Satisfied	Somewhat satisfied	Not satisfied		
4. Is there anything we can improve with any of the above?					



# INSTITUTE OF HIGHER EDUCATION AND RESEARCH (Declared as Deemed-to-be-University under section 3 of UGC Act 1956) BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY DEPARTMENT OF AERONAUTICAL ENGINEERING



Department of Aeronautical Engineering					
	Value Added Course				
Course on Jet and Rocket Propulsion					
		List of students Registered on 12/02/2019			
SNO	Reg NO	Name of the Student			
1	U15AE036	ROSELIN L			
2	U15AE037	RUTHRA S			
3	U15AE038	S KARISHMA CHANDINI			
4	U15AE039	SAMPATHARAO PARDHU			
5	U15AE040	SANGEETHA N			
6	U15AE041	SANJAY V			
7	U15AE042	SHIVA SHANKAR V N			
8	U15AE043	SWATHITH K S			
9	U15AE044	SWETHA R			
10	U15AE045	PEMMASANI HANUMANTH RAO			
11	U15AE046	TYAGARAJAN BHAVANI SHANKAR			
12	U15AE047	VALMIKI MANOJ KUMAR			
13	U15AE048	BIKASH BORADO			
14	U15AE049	YALAMARTHI SRAVANI			
15	U15AE050	YANAMADHALA AVINASH CHOWDARY			
16	U15AE051	JAKKULA RAM SARATH YADAV			
17	U15AE052	MANE JERMIAH			
18	U15AE053	PALLEKONDU SIRISHA			
19	U15AE054	ANBARASAN R			
20	U16AE036	GHANTASALA PARASU RAJU			
21	U16AE037	K GAMANA			
22	U16AE038	GORIPARTHI PRATHYUSHA			
23	U16AE039	MULAKA BHAVANA			
24	U16AE040	THULLIMALLI RATNA KISHORE			
25	U16AE041	LAKSHMI NARASIMHAN V			
26	U16AE042	ADIGARLA BHANU PRASAD			
27	U16AE043	SRI HARSHA VARMA MANTHENA			
28	U16AE044	GOGULAMANDA VEERA SWAMY RAJIV			
29	U16AE045	HURASU VENUH			
30	U16AE046	PRABAKARAN P			
31	U16AE047	ZAHID AYOOB			
32	U16AE048	PASUPULETI PUJITHA			
33	U17AE051	RAKESH M A			
34	U17AE052	MOTHISH C			
35	U17AE053	KONDEPATI BHARATH SAI TEJA			
36	U17AE054	YARLAGADDA SAI KIRAN			
37	U17AE055	CHEEPURU SATISH KUMAR			



	38	U17AE056	MADDIPATI VENKATESH
	39	U17AE057	ARISETTY NAVYA
	40	U17AE058	KAILA SMATIKA
	41	U17AE059	RAMESH UNNAMATLA
r	42	U17AE060	BHARATH KUMAR NUNE
	43	U17AE061	YAKKANTI SUBBA RAMI REDDY
	44	U17AE062	KARRE SAI VENKATA SIVA RAHUL
	45	U17AE063	DEVANSH SAI SAHU
	46	U17AE064	KANALA KAMALAKAR REDDY
	47	U17AE065	SHAIK KHADER SHARIEF
	48	U17AE066	PUTTA YOGABALAJI
	49	U17AE067	BADE ANIL KUMAR
	50	U17AE068	SHAIK BAJI
	51	U17AE069	GYANARANJAN PARIDA
	52	U17AE070	T DEEPAK KUMAR
	53	U17AE071	BODE PARAMESH
	54	U17AE072	ARUNPANDIYAN K
	55	U17AE073	M SREEKANYA
	56	U17AE074	MARTHALA BALAJI REDDY
	57	U17AE075	ARULPRAKASH G
	58	U17AE076	RAMAN BHASKAR PANDIAN
	59	U17AE077	BARISH AHAMED F
	60	U17AE078	KRISHNAKUMAR A
	61	U17AE079	SENAPATHI LOKESH
	62	U17AE080	CHINTA SHRAVAN KUMAR
	63	U17AE081	KAMESH K
	64	U17AE082	HEMNATH A V
	65	U17AE083	SHAIK NIZAMUDDIN
	66	U17AE084	BALUSU DEVIPRASAD THARUNMANI KOUSIK
	67	U17AE085	SUSWANTH P
	68	U17AE086	NETHALA TERIYA ROSHAN
	69	U17AE087	PASUPULETI MANIKANTA
	70	U17AE088	BALU RAJA SEKHAR REDDY
	71	U17AE089	SHAIK PAPABHAI ABRAR AHMED
	72	U17AE090	MOOLINTE GURU SAI KRISHNA
	73	U17AS010	ARJA VENKATA HEMANTH KUMAR

