

THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015 TCE-III

| S.No | One credit course need analysis sheet | | | |
|------|--|---|--|--|
| 1. | Name of the Course | Aerospace materials and manufacturing processes | | |
| 2. | Name of the Industry | DRDO | | |
| 3. | Name of the SIG associated with | Manufacturing | | |
| 4. | Motivation for offering the course | To provide an exposure and application | | |
| | | of the aerospace materials developments | | |
| 4.1 | Feedback (If yes, Details of the feedback as per the annexure I) | | | |
| | From Recruiter Y/N | | | |
| | From Employer | Y/N | | |
| | From Alumni | Y/N | | |
| | From Academic Council members | Y/N | | |
| | From Board of Studies members | Y/N | | |
| | From Senior students | | | |
| | From current students | Y/N Y/N | | |
| | | | | |
| | From Performance Assessment | Y/N | | |
| | Committee Every Description and Admirous | \$7/NT | | |
| | From Department Advisory committee | Y/N | | |
| 4.2 | | O (If was datails) | | |
| 4.2 | Faculty participation in Seminar/FDI | (II yes, details) | | |
| | At Industry | | | |
| 5. | At Industry Outcomes sympoted | | | |
| 5. | Outcomes expected Technology transfer | | | |
| | Technology transfer | | | |
| | Student Internship | | | |
| | Placement Constraint of EDD/constraint of ECE | | | |
| | Organizing FDP/seminar at TCE | | | |
| | Collaborative research/consultancy | | | |
| | projects // // // // // // // // // // // // // | | | |
| | Faculty as Trainee/Trainer in the | | | |
| | Industry | | | |
| | Joint publications | | | |
| | Setting up of Lab/Infrastructure | | | |



THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015 TCE-III

Attendance sheet for the one/two credit

Name of the Course : Aerospace Materials and Manufacturing Processes

Name of the Industry : Defense Research and Development Organization

Name of the Expert : Dr. T. Ramprabhu

Number of Students enrolled: 38

Name of the Faculty : Dr. M. Kathiresan

Date/Time/Venue : 17.02.2018 & 25.02.2018 (Two days)

| S. No | Reg. No | Name | Department | Signature |
|-------|---------|------|------------|-----------|
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THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI 625 015 (A Govt. Aided ISO 9001:2008 Certified Autonomous Institution Affiliated to Anna University)

DEPARTMENT OF MECHANICAL ENGINEERING

14ME1RO - AEROSPACE MATERIALS AND MANUFACTURING PROCESS

| SL. | Attendance Sheet | | | | | | |
|-----|------------------|----------------------|------------------|-----------------|----------------|----------------|----------|
| NO. | REG.NO. | NAME | 17.02. 2018 | | 25.02.201 | 8 (Sunday) | 1 |
| 1 | | TVAIVIE | FN | AN | FN | AN | 1 |
| 2 | 15G002 | S. Abiraman | S. Alidar | S. Abram - | c Asimul | 5. Aramy | |
| 3 | 15G005 | M. Alice Nila | M. Alia Nila. | & M. Alica Nole | M. Alfer Nola | M. Alica Nila. | |
| 4 | 15G008 | E. Aravindh | Out | 1 | 7/20 | DA | |
| 5 | 15G014 | D. Ashwin Kumar | Dotshulpkumas. | Delinidumas. | D. Ashin kunt: | DAShenknuck | |
| 6 | 15G022 | V. Dhanoordaran | Saaf | Bahr | -Abose ~i | ARSONT- | |
| 7 | 15G025 | R. Dinesh Kumar | R Dreeblamer | R. Doebbim | & Dineshturo | R. Drashbe | |
| 8 | 15G031 | C. Gopinath | cinopin | Casió | C.COD | Absent | |
| 9 | 15G037 | T. Harishkumar | shuffer. | helie | The same | Wiedow | İ |
| 10 | 15G040 | U. Jegannath | v. amos. | V. Lund | V. June | W. Lilian | |
| 11 | 15G041 | V. Jeya Surya | V. Tevi LT | V. Tyclf | V Jeyah 1 | Absent | 1 - |
| 12 | 15G047 | T.R. Kishore Babu | Ration | Ratar | BA | 2 Salas | لتقط |
| | 15G066 | V. Praveenkumar | v.hul- | v. huy | V. Prault | V Perk | |
| 13 | 15G073 | M. Ramprakash | Departy. | Street | duras 1 | shipuja | |
| 14 | 15G079 | K. Santhoshram | Soul . | Abracut | Sont. | Santi | |
| 15 | 15G081 | S. Sathesh | Salmis | Sthous | Marille | Wittund | |
| 16 | 15G085 | V. Selvaraj | V. dely | v.Shi | Valeni | V. John | ſ |
| 17 | 15G088 | N. Siddarth | Sidharten | Sidlatax | Siddlentin | | |
| 18 | 15G091 | L. Sridhar | grille. | gull. | Quil & | Absent | |
| 19 | 15G093 | T. Subramaniam | 1.5/ | 1. Sulles | T. Bobain | Absent | - |
| 20 | 15G096 | T. Surendar | Tymas. | Absent | A Varia | Marit. | |
| 21 | 15G101 | M. Thirupathi | 1. Hundyfi | 4- Husby. | M. Thurway | Absout | \wedge |
| 22 | 15G105 | G. Venkata Subramani | 7. Vastalo Call. | Sp. Vertable Vo | P. Vandans | G. Nonto | Ø6_ |
| 23 | 15G106 | K. Vibhish | 1 K. M. port | K. Vale | K. VAbr | Absent | 2000 |
| 24 | 15G108 | R. Vignesh | R. Vigness | QZ/2000 | Alband. | Phone | |
| 25 | 15G114 | P. Vivaspandian | P. Vinespeuly | P. Wiegent. | P. Viwspaul | Absert | |
| 26 | 15G124 | M. Gunasekaran | M. Guny | M. Gury | M. Gun | Absent | |
| 27 | 15G129 | S. Kanagarajan | 5. Kary rajon | Si Konaga Teaja | S. Kenyerry | S. Kongrasja | |
| 28 | 15G131 | R. Kavinkumar | cione. | 6000 | proj. | Absent | - |
| 29 | 15G132 | P.S. Mathan Kumar | P.S. Cather. | P.S. Bather. | t-s. Cattle | P.S. Patter. | |
| 30 | 15G134 | S. Prabhakaran | بيناد | 3.世半 | stx. | stay. | |
| 31 | 15G136 | P. Praveen | P. Pravos | P. Praver | P. Frances | P. Braves | |
| 32 | 15G137 | M. Puvaneshwaran | u. Zwas | M. Enos | M. Jula | Absent | |
| 33 | 15G140 | P. Ramkumar | | DP4 | PPA | Absent | |
| 34 | 15G141 | P. Sam Jovart | P. Samfort | Plansforest | P. Samfort | P. Sumfort | F |
| 35 | 15G142 | C. Sasikumar | C. Barry | L. sarah | c. solitus | Casyl | D |
| | 15G145 | T. Senthil Kumar | T. Sently King | 1. Sept 17671 | 1: Yest War | N 10 | , |
| 36 | 15G146 | S. Subash | Absent | About | 3. Secola | 8. Books | |
| 37 | 15G150 | S. Vriddhachalam | (Valla | 1/2/2 | 1st and | 2) and | = |
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THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015



TCE-III

Course Schedule

Name of the Course : Aerospace Materials and Manufacturing Processes

Name of the Industry : Defense Research and Development Organization

Name of the Expert : Dr. Ramprabhu

Number of Students enrolled: 38

Name of the Faculty : Dr. M.Kathiresan

Date/Time/Venue : 17.02.2018 & 25.02.2018 (Two days)

| Date | Time | Topics | Remarks |
|------|---------------|---|---------|
| Day1 | 17.02.2018 FN | Composite materials - Metal matrix composite, Nano Composites, Functional graded composite, High entropy alloy based composite, Quasi crystal based composite for aircraft structure and engine applications. | |
| | 17.02.2018 AN | Alloys - Al, Mg, Ni and Ti alloys and shape memory alloys for aircraft structures Manufacturing processes – Advanced manufacturing processes – Thixoforging- | |
| Day2 | 25.02.2018 FN | Multidirectional forging, Precision forging Case studies on forging of aerospace components (Impeller and Landing gear modelling and processing), Case studies on powder metallurgy process of aircraft brake pad processing, | |
| | 25.02.2018 AN | Case studies on casting of aerospace components (aircraft mounted accessory gear box casting gear modelling and processing). NDT techniques for aircraft component qualification, various NDT types. Tribological studies on aerospace materials, various types of tribological studies | |
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THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015

Course Instructor Feedback for One/Two credit course

TCE-III

Name of the Course : Aerospace Materials and Manufacturing Processes

Name of the Industry : Defense Research and Development Organization

Name of the Expert : Dr. T. Ramprabhu

Date/Time/Venue : 17.02.2018 & 25.02.2018 (Two days)

| | Comments |
|---|-----------|
| Student attendance | Good |
| Level of the students in understanding the concepts | Excellent |
| Any suggestions regarding new content to be included as Prerequisites/Special electives | - |
| Hall/Lab arrangements | Very good |
| Hospitality | Very Good |