

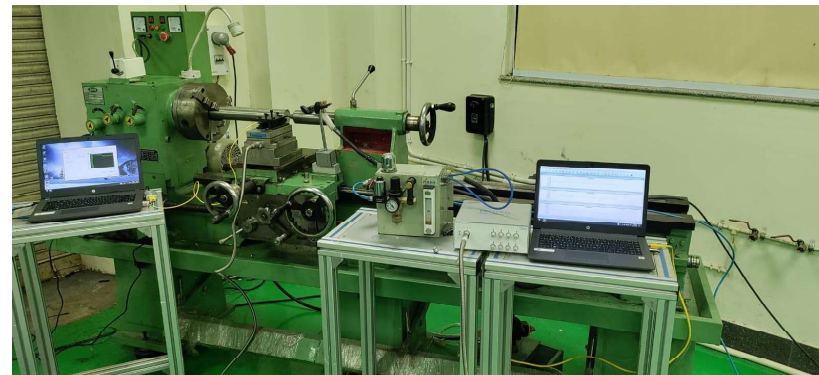
CENTRE FOR ADVANCED STUDIES

DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY



5-Days Short-Term Course on Advanced Manufacturing

27-31 March 2022



Registration Link:
<https://cas.res.in/workshopreg.html>



Free Registration – Limited seats
Last Date of Registration: 20th March, 2022

Highlights



Eligibility: B.Tech. (4th Year Mechanical Engineering)
Infrastructure Available: Manufacturing Lab
Mode: Offline
Number of Seats: 30

Contents

- ✓ Turning, milling and surface grinding operation on advanced machining setups with conventional and advanced cutting fluids
- ✓ MQL machining
- ✓ Measurement of cutting forces, surface roughness and nodal temperature in machining processes
- ✓ End Session and Discussion on Problems



System support

Anurag Chaubey



Coordinator
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5-Days Short-Term Course on **Advanced Manufacturing**

SCHEDULE

Day	Session	
	Forenoon	Afternoon
Day 1	Introduction: Machining fundamentals, Mechanics of machining, Tool signature	<i>Turning operation on turning setup with conventional and advanced cutting fluids: Measurement of cutting forces, surface roughness and nodal temperature in machining processes</i>
Day 2	<i>Milling operation on vertical milling machine with conventional and advanced cutting fluids: Measurement of cutting forces, surface roughness and nodal temperature in machining processes</i>	<i>Grinding operation on surface grinding machine with conventional and advanced cutting fluids: Measurement of cutting forces, surface roughness and nodal temperature in machining processes</i>
Day 3	Hands-on on MQL Milling operation	Hands-on on MQL turning operation
Day 4	Hands-on on MQL surface grinding operation	<i>Tribological investigation of cutting fluids on Pin-on disc tribometer under different cooling environment</i>
Day 5	Research gaps in milling, turning and grinding processes	<i>End Session and Discussion on Problems</i>

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