

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

Dept MME (Meta)

SRS / Metal Economics / AUG 2022 / v DEC 4 2022 / pp 4

(Important details already conveyed to the class)

COURSE OUTLINE TEMPLATE			
Course Title	Elective: ECONOMICS OF METAL PRODUCTION PROCESSES		
Course Code	MTPE 7	No. of Credits	Three (3)
Department	MME (Meta)	Faculty	Prof SankaraRaman Sankaranarayanan (SRS)
Pre-requisites Course Code	MTPC 18 (old 21) Iron making and Steel Making		
Course Coordinator(s) (if, applicable)	SRS (Raman)		
Other Course Teacher(s)/Tutor(s) E- mail	(others: Nil) raman@nitt.edu	Telephone No.	98947 02353 X 3450 (MME office) WA: 9385612153
Course Type	Programme Elective (BTech MME Programme)		
COURSE OVERVIEW			
A course on the macro-economic aspects of metallurgical and allied industries			
COURSE OBJECTIVES			
To understand the role of metallurgical industries in the economy; to understand how metallurgical companies come up with innovative practices with respect to raw materials, processes, cost, yield and market conditions.			
COURSE OUTCOMES (CO)			
Course Outcomes			Aligned Programme Outcomes (PO)

CO 1. Understand terms like tonnage, annual turnover, macroeconomics in metal and materials sector	[1,5]
CO 2. Estimate the cost respect to investment, expenses, savings and profits.	[5]
CO 3. Identify the natural resources available for metallurgical industries and explore new grades of metals and materials compatible with green manufacturing	[3, 6]
CO 4. Understand the sustainable production of metals and materials	[1, 7]
CO 5. Discuss about the energy, environment, waste generation and disposal	[6, 7]

COURSE TEACHING AND LEARNING ACTIVITIES

Indicative sequence:

(Syllabus listed in the web site NOT to be taken as rigid point of reference. Shall evolve.)

Economy, macro – economics, GDP, role of mining and minerals in GDP, scenario of Indian and international primary metal production, investments, fluctuations in the economy wrt primary metal production, market scenario, discussion on annual report of some metallurgical companies, recent / current topics including IBC, take overs, debt reduction, green manufacturing, modernization,

(Mode of delivery: predominantly **chalk and talk**)

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
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1.	One mid-term test	(to be announced)	One hour	20%
2.	One assignment	(to be announced during the term)	Preparation possibly ten hours	20%
3.	Surprise Test OR additional assignment	Later part of the term	To be confirmed	20%
4.	End semester / final exam on full syllabus	(Common schedule)	Three hours	40%

ESSENTIAL READINGS: Textbooks, reference books, Websites, journals, etc

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COURSE EXIT SURVEY (mention the ways in which the feedback about the course is assessed and indicate the attainment also)

Feedback encouraged; (will use input from dept MME for format)

COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)

Students expected to participate in earnest and honest manner

Active discussion encouraged in the class room

Students will be **mentored** towards challenges in / competitions organized by the steel industry

Students expected to attend all classes

Attendance requirement – vide **prevailing policy**

ADDITIONAL COURSE INFORMATION

Contents of this elective course will be very useful to those opting to join management programmes / economics programmes

INSTRUCTIONS Regarding ASSIGNMENT:

(teams of three or four students each)

(one submission per team)

(requires independent reading)

(consultation with the teacher – strongly recommended)

FOR SENATE'S CONSIDERATION

Course Faculty __SRS__ CC-Chairperson _____ HOD _____