

STELLA MARY'S COLLEGE OF ENGINEERING
Aruthenganvilai, Kallukatti Junction, Azhikal Post, Kanyakumari District – 629202.

SMCE/VEC/FM-01/MGMS/01/2014 2014 - 2015 (Odd/Even)

Meeting Name:	VALUES AND ETHICS CLUB -	INSTATEMENT AND PL	ANNING			11/9/2014
Date of Meeting: (MM/DD/YYYY)	11/9/2014		Time:	Time: 10.30 am to 11.30 am		
Minutes Prepared By:	Mr Starlin Deva Prince		Location	·-	Principal's Office	
1. Meeting Objective	The second second	ELECTRICAL SECTION		10.00	1 includes office	
To frame the values and eth	nics club for creating strong ethica	I values in students				harden betreet
2. Attendance at Meeting		THE PARTY	CONTRACTOR OF THE PARTY OF	BOLL	THE PERSON NAMED IN COLUMN	The second second
Name	Department	E-mail	Annual State of State of	Phone		
ist Enclosed						
The state of the s	A Diselsone	CONCENS / DEER	TENE		S. ACTO) STOLET (LEE) PARTITUDA (COST PRINCED)	
To select the members	ethics club Different strategies of ethical values in The heads were as who would perfor	ethics club Different strategies were discussed for the developme of ethical values in students.		sugges centre • EE • EC • ME Mii • S&	embers from each department ted were approved as members for the for innovation E- Mr. K. Ezhil Vignesh E- Mrs. Ashley Beby CHANICAL – Mr. Amala Mithin nther Sign H- Mrs.A.L.MerlinSheela E- Mrs. G. Santhiya	immediate
rame the responsibilitie tembers		edership throughout the interests and we dent community.		Crewit and dur Ac no de un	cating the knowledge concerned the the distinction between Right 1 Wrong, with moral choices, ties and obligations. It was a conflict showledging shared values, rmalizing values conflicts fining professional purpose derstanding the self and preparing ponses.	

(5)		STELLA MA	ARY'S COL	LEGE OF ENGIN	NEER kumari I	ING District – 629202.	SMCE/VEC/FM-01/MGMS/01/201 2014 - 2015 (Odd/Ever
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Date of Meeting: (MM/DD/YYYY)	11/9/2014		NOTATEMENT A	Time:		10 30 am to 11 30 am	
Minutes Prepared By: Mr Starlin Deva		Prince		Location:		Principal's Office	
7. Next Meeting (if appli Date:	lities were framed and	Time:			38		ST. SECTION ASSESSED.
MM/DD/YYYY) Objective:		Time:		Location:			
00				Signature:	E 141.	4	
eeting Documentor				Principal	, , ,		

2. Attendance at Meeting

S.No.	Name	Designation	Department	Signature
1	Mr.Starlin Deva Prince	Asst. Prof	Mech	1000
2	Mr. K. Ezhil Vignesh	- Constitute of the	Medi	Born
	INI. K. Ezilii Vignesh	Asst. Prof	EEE	Minge
3	Mrs.Ashley Beby	Asst. Prof	ECE	N. Co.
5	Mr. Amala Mithin Minther Sign	Asst. Prof	MECH	U Bar
5	Mrs.A.L.MerlinSheela	Asst. Prof	S&H	Shirty
	Mrs. G. Santhiya	Asst. Prof	CSE	Aguar



STELLA MARY'S COLLEGE OF ENGINEERING

Aruthenganvilai, Kallukatti Junction, Azhikal Kanyakumari District-629202

HumanValues & Professional Ethics

"A person who is offered a quality education will be able to serve the region, the state and the nation through resourceful educational programmes. A quality based education consequently helps in upgrading the individual's growth which in turn endorses the growth of the nation. Stella Mary's College of Engineering proffers Quality Education to create a personal paradigm, devoted to master the life skills required for success".

Objectives of Professional Ethics & Human Values in Engineering:

- To understand the moral values that ought to guide the Engineering profession. Resolve the moral issues in the profession.
- To justify the moral judgment concerning the profession.
- Intended to develop a set of beliefs, attitudes and habits that engineers should display concerning morality.
- To create an awareness on Engineering Ethics and Human Values.
- To inspire Moral and Social Values and Loyalty.
- To appreciate the rights of others.

Professional Ethics:

Ethics is an activity which concerns with the investigation of moral values in moral issues. As for as an Engineer is concern he/she should have an ethical as well as a social responsibility to himself, to his subordinates and to his society. The set of standards adopted by professionals is called as Professional ethics. The set of ethical standards that are applicable for an engineering profession is known as engineering ethics. Engineering ethics is about balancing cost, schedule and risk in practical. Engineering ethics helps an Engineer to discover moral principles like obligation, rights and ideals in this field. Formal code, Focus, Precedence, Restriction. Two dimensional (positive & negative) and Role morality are some of the important characters of professional ethics. Few professional models are Engineer as Social Enablers as well as Catalysts, Engineers as Game Players, Engineers as Bureaucratic Servants, Engineers as Guardians, Engineers as Social Servants and Engineers as Saviors.



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Department	Year/sem	Course Code	Ethics is included in Cu	No. of Students
MECH	The table		Course (vame	No. of Students
	111/5 th sem 2015-16	GE 6075	Professional ethics in	57
МЕСН	111/5 th sem 2016-17	GE 6075	engineering Professional ethics in	56
МЕСН	111/5 th sem 2017-18	GE 6075	engineering Professional ethics in	52
МЕСН	III/5 th sem 2018-19	GE 6075	Professional ethics in engineering	56
ECE	IV/8 th sem 2016-17	GE 6075	Professional ethics in engineering	39
ECE	IV/8 th sem 2017-18	GE 6075	Professional ethics in engineering	14
ECE	IV/8 th sem 2018-19	GE 6075	Professional ethics in engineering	27
EEE	IV/8 th sem 2016-17	GE 6075	Professional ethics in engineering	16
EEE	IV/8 th sem 2017-18	GE 6075	Professional ethics in engineering	11
EEE	IV/8 th sem 2018-19	GE 6075	Professional ethics in engineering	42
IT	IV/8 th sem 2016-17	GE 6075	Professional ethics in engineering	10

Dr.R. Suresh Bremil Kumar, M.E., Ph.D.
PRINCIPAL
STELLA MARY'S COLLEGE OF ENGINEERING
ARUTHENGANVILAI, AZHICKAL POST-629 202
KANYAKUMARI DISTRICT

SYLLABUS EXTRACTED FROM ANNA UNIVERSITY REGULATION 2013

ANNA UNIVERSITY, CHENNAI AFFILIATED INSTITUTIONS

R - 2013

B.E. MECHANICAL ENGINEERING I – VIII SEMESTERS CURRICULUM AND SYLLABUS

SEMESTER I

SL. No.	COURSE	COURSE TITLE	L	Т	Р	С
THEO	RY					
1.	HS6151	Technical English – I	3	1	0	4
2.	MA6151	Mathematics – I	3	1	0	4
3.	PH6151	Engineering Physics – I	3	0	0	3
4.	CY6151	Engineering Chemistry – I	3	0	0	3
5.	GE6151	Computer Programming	3	0	0	3
6.	GE6152	Engineering Graphics	2	0	3	4
PRAC	TICALS					
7.	GE6161	Computer Practices Laboratory	0	0	3	2
8.	GE6162	Engineering Practices Laboratory	0	0	3	2
9.	GE6163	Physics and Chemistry Laboratory - I	0	0	2	1
		TOTAL	17	2	11	26

SEMESTER II

SL. No.	COURSE	COURSE TITLE	L	Т	Р	С
THEO	RY					
1.	HS6251	Technical English – II	3	1	0	4
2.	MA6251	Mathematics - II	3	1	0	4
3.	PH6251	Engineering Physics – II	3	0	0	3
4.	CY6251	Engineering Chemistry – II	3	0	0	3
5.	GE6252	Basic Electrical and Electronics Engineering	4	0	0	4
6.	GE6253	Engineering Mechanics	3	1	0	4
PRAC	TICALS					
7.	GE6261	Computer Aided Drafting and Modeling Laboratory	0	1	2	2
8.	GE6262	Physics and Chemistry Laboratory - II	0	0	2	1
		TOTAL	19	4	4	25



SEMESTER V

SL.	COURSE					
NO.	CODE	COURSE TITLE	L	т	_	_
THEOR	Υ		-		Р	С
1.	ME6501	Computer Aided Design				
2.	ME6502	Heat and Mass Transfer	3	0	0	3
3.	ME6503	Design of Machine Elements	_ 3	0	0	3
4.	ME6504	Metrology and Measurements	3	_ 0	0	3
5.	ME6505	Dynamics of Machines	3	0	0	3
6	GE6075	Professional Ethics in Engineering	3	0	0	3
PRACTI		Trolessional Ethics in Engineering	3	0	0	3
7.	ME6511	Dynamics Laboratory				
8.	ME6512	Thermal Engineering Lab	0	0	3	2
9.	ME6513	Thermal Engineering Laboratory-II	0	0	3	2
U.	IVILUSIS	Metrology and Measurements Laboratory	0	0	3	2
		TOTAL	18	0	9	24

SEMESTER VI

SL.	COURSE	OLINEO I LIV VI				
NO.	CODE	COURSE TITLE	L	Т	Р	С
THEOR'	Υ			1		
1.	ME6601	Design of Transmission Systems	3	0	0	3
2.	MG6851	Principles of Management	3	0	0	3
3.	ME6602	Automobile Engineering	3	0	0	3
4.	ME6603	Finite Element Analysis	3	0	0	3
5.	ME6604	Gas Dynamics and Jet Propulsion	3	0	0	3
6.		Elective - I	3	0	0	3
PRACTI	CAL					
7.	ME6611	C.A.D. / C.A.M. Laboratory	0	0	3	2
8.	ME6612	Design and Fabrication Project	0	0	4	2
9.	GE6563	Communication Skills - Laboratory Based	0	0	4	2
		TOTAL	18	0	11	24

SEMESTER VII

SL. NO.	COURSE	COURSE TITLE	L	Т	Р	С
THEOF	RY					
1.	ME6701	Power Plant Engineering	3	0	0	3
2.	ME6702	Mechatronics	3	0	0	3
3.	ME6703	Computer Integrated Manufacturing Systems	3	0	0	3
4.	GE6757	Total Quality Management	3	0	0	3
5.		Elective – II	3	0	0	3
6.		Elective ~ III	3	0	0	3
PRACT	ICAL					
7.	ME6711	Simulation and Analysis Laboratory	0	0	3	2
8.	ME6712	Mechatronics Laboratory	0	0	3	2
9.	ME6713	Comprehension	0	0	2	1
		TOTAL	18	0	8	23

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UNIT IV FORCED VIBRATION

Response of one degree freedom systems to periodic forcing - Harmonic disturbances - Disturbance caused by unbalance - Support motion -transmissibility - Vibration isolation vibration measurement.

UNIT V MECHANISM FOR CONTROL

Governors – Types – Centrifugal governors – Gravity controlled and spring controlled centrifugal governors - Characteristics - Effect of friction - Controlling force curves. Gyroscopes - Gyroscopic forces and torques - Gyroscopic stabilization - Gyroscopic effects in Automobiles, ships and airplanes.

OUTCOMES:

TOTAL: 45 PERIODS

Upon completion of this course, the Students can able to predict the force analysis in mechanical system and related vibration issues and can able to solve the problem

TEXT BOOK:

- Uicker, J.J., Pennock G.R and Shigley, J.E., "Theory of Machines and Mechanisms" ,3rd 1. Edition, Oxford University Press, 2009.
- Rattan, S.S, "Theory of Machines", 3rd Edition, Tata McGraw-Hill, 2009 2.

REFERENCES:

- Thomas Bevan, "Theory of Machines", 3rd Edition, CBS Publishers and Distributors, 2005.
- 2.
- Cleghorn. W. L, "Mechanisms of Machines", Oxford University Press, 2005 Benson H. Tongue, "Principles of Vibrations", Oxford University Press, 2nd Edition, 2007 3.
- 4. Robert L. Norton, "Kinematics and Dynamics of Machinery", Tata McGraw-Hill, 2009.
- 5. Allen S. Hall Jr., "Kinematics and Linkage Design", Prentice Hall, 1961
- 6. Ghosh. A and Mallick, A.K., "Theory of Mechanisms and Machines", Affiliated East-West Pvt. Ltd., New Delhi, 1988.
- 7. Rao.J.S. and Dukkipati.R.V. "Mechanisms and Machine Theory", Wiley-Eastern Ltd., New
- 8. John Hannah and Stephens R.C., "Mechanics of Machines", Viva Low-Prices Student Edition,
- 9. Grover, G.T., "Mechanical Vibrations", Nem Chand and Bros., 1996
- William T. Thomson, Marie Dillon Dahleh, Chandramouli Padmanabhan, "Theory of Vibration 10. with Application", 5th edition, Pearson Education, 2011
- V.Ramamurthi, "Mechanics of Machines", Narosa Publishing House, 2002. 11.
- Khurmi, R.S., "Theory of Machines", 14th Edition, S Chand Publications, 2005. 12.

GE6075

PROFESSIONAL ETHICS IN ENGINEERING

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OBJECTIVES:

To enable the students to create an awareness on Engineering Ethics and Human Values, to instill Moral and Social Values and Loyalty and to appreciate the rights of others.

HUMAN VALUES UNITI

10

Morals, values and Ethics - Integrity - Work ethic - Service learning - Civic virtue - Respect for others - Living peacefully - Caring - Sharing - Honesty - Courage - Valuing time - Cooperation -Commitment - Empathy - Self confidence - Character - Spirituality - Introduction to Yoga and meditation for professional excellence and stress management.

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UNIT II ENGINEERING ETHICS

Senses of 'Engineering Ethics' - Variety of moral issues - Types of inquiry - Moral dilemmas - Moral Autonomy - Kohlberg's theory - Gilligan's theory - Consensus and Controversy - Models of professional roles - Theories about right action - Self-interest - Customs and Religion - Uses of **Ethical Theories**

ENGINEERING AS SOCIAL EXPERIMENTATION **UNIT III**

9

Engineering as Experimentation - Engineers as responsible Experimenters - Codes of Ethics -A Balanced Outlook on Law.

SAFETY, RESPONSIBILITIES AND RIGHTS **UNIT IV**

Safety and Risk - Assessment of Safety and Risk - Risk Benefit Analysis and Reducing Risk -Respect for Authority - Collective Bargaining - Confidentiality - Conflicts of Interest - Occupational Crime - Professional Rights - Employee Rights - Intellectual Property Rights (IPR) - Discrimination

UNIT V GLOBAL ISSUES

8

Multinational Corporations - Environmental Ethics - Computer Ethics - Weapons Development -Engineers as Managers - Consulting Engineers - Engineers as Expert Witnesses and Advisors -Moral Leadership -Code of Conduct - Corporate Social Responsibility

OUTCOMES:

TOTAL: 45 PERIODS

Upon completion of the course, the student should be able to apply ethics in society, discuss the ethical issues related to engineering and realize the responsibilities and rights in the society

TEXTBOOKS:

- Mike W. Martin and Roland Schinzinger, "Ethics in Engineering", Tata McGraw Hill, New Delhi, 1.
- 2. Govindarajan M, Natarajan S, Senthil Kumar V. S, "Engineering Ethics", Prentice Hall of India, New Delhi, 2004.

REFERENCES:

- Charles B. Fleddermann, "Engineering Ethics", Pearson Prentice Hall, New Jersey, 2004. 1.
- Charles E. Harris, Michael S. Pritchard and Michael J. Rabins, "Engineering Ethics Concepts 2. and Cases", Cengage Learning, 2009
- John R Boatright, "Ethics and the Conduct of Business", Pearson Education, New Delhi, 2003 3.
- Edmund G Seebauer and Robert L Barry, "Fundameta's of Ethics for Scientists and 4. Engineers", Oxford University Press, Oxford, 2001
- Laura P. Hartman and Joe Desjardins, "Business Ethics: Decision Making for Personal 5. Integrity and Social Responsibility" Mc Graw Hill education, India Pvt. Ltd., New Delhi 2013. World Community Service Centre, "Value Education", Vethathiri publications, Erode, 2011
- 6.

Web sources:

- www.onlineethics.org 1.
- www.nspe.org 2.
- www.globalethics.org 3.
- 4. www.ethics.org

HATTY'S COLLECT OF EMPIREL ARUTHENGANVIL AZF CKAL POST - 629 244 MANYAKUMAR OBTRICT



Yoga session by Mr P. R. Sundaresan MSc Electronics , Msc yoga , M.phil Physical education



Students Participation in yoga program