PDEA's

Prof. Ramkrishna More Arts, Commerce and Science College, Akurdi, Pune 411044 <u>B. Voc. (Automotive Electronics)</u>

Degree Course (2018-19)

Sr.	Name of Course	B.Voc. (Automotive Electronics)	
No.			
1	Department	Vocational Education	
2	Duration	3 Years	
3	Course Coordinator	Dr. Rokade Avinash Vinayak	
4	Objectives	 To understand the concepts of Automotive Electronics and it's evolution and trends Automotive systems & subsystems overview. 	
		 To understand sensors and sensor monitoring mechanisms aligned to automotive systems, different signal conditioning techniques, interfacing techniques and actuator mechanisms. To understand, design and model various automotive control systems using Model based development technique. To understand role of Microcontrollers in ECU design and choice of appropriate Hardware and Software. To describe various communication systems, wired and wireless protocols used in vehicle networking. To understand Vehicle on board and off board diagnostics. 	
5	Syllabus	Yes	
6	Eligibility Criteria	12 th Science or equivalent	

Details about Structure/Pattern of Syllabus:

- 1. Title of the Course: B.Voc. (Automotive Electronics)
- 2. Course Level: 5;6;7
- 3. Syllabus to be implemented from the Academic year: 2018-19
- 4. Preamble of the Syllabus: Attached
- 5. Faculty of the Course :Science and Technology
- 6. Eligibility for Admission: 10+2 or Equivalent
- 7. Duration of the Course: 3 Years
- 8. Intake Capacity of Students: 50

9. Examination:

- I. Pattern of Examination
 - i. Internal exam, Term end exam, Practical, Oral, Project.
 - ii. Pattern of the question paper: As per University rules
- II. Standard of Passing: Int 30%, Ext 30%, (Int + Ext) = 40%
- III. ATKT Rules: Acquiring 50 % of credits (As per University rules)
- IV. Award of Class: As per University rules
- V. External Students: NA
- VI. Setting of Question Paper/Pattern of Question Paper: As per University rules
- VII. Verification/Revaluation: As per University rules

10. Structure of the Course:

- I. Compulsory Paper: 8
- II. Optional Paper: 0
- III. Question Paper and Paper: 8
- IV. Medium of Instructions: English
- 11. Equivalence of previous syllabus along with propose syllabus.: NA
- 12. University Terms: As per University rules
- 13. Subject wise Detailed Syllabus: Attached
- 14. Recommended Books: Attached with Syllabus
- 15. Qualification of Teacher: M.Sc. or M.E. (Electronics) or SET/NET or equivalent
- 16. Detailed Syllabus CD (only word file) : Attached

Syllabus for F. Y. B. Voc. (Automotive Electronics):

	FY B Voc (Semester-I)	Credits
1.	BVAE-T111:Basic Electrical circuits	4
	(General)	
2.	BVAE-T112: Basic Electronics	4
	(General)	
3.	BVAE-T113 Instrumentation (General)	4
4.	BVAE-P111 :Practical on Electrical safety,	4
	Principles of DC/AC electricity, Cabling and wiring	_
	(Skill)	
5.	BVAE-P112: Practical on Auto wiring (Two and	4
	four wheeler) (Skill)	
6.	BVAE-P113: Practical on Basic electronics and	4
	Circuit design (Skill)	
7.	BVAE-P114: Practical on Instrumentation	4
	(Skill)	
8.	BVAE-P115: Industrial visits and project report	2
	(Skill)	
	FY B Voc (Semester-II)	
1.	BVAE-T121: Principles of Advanced	4
	Electronics (General)	
2.	BVAE-T122: Principles of Digital Electronics	4
	(General)	
3.	BVAE-T123 : English (Literature & Grammar)	4
4.	BVAE-P121: Practical on Analog electronics	4
	(Skill)	
5.	BVAE-P122 :Practical on Digital electronics	4
	(Skill)	
6.	BVAE-P123: Practical on design of Advance	4
	electronic circuits (Skill)	
7.	BVAE-P124: Project (Skill)	4
8.	BVAE-P125: Industrial visits and project	2
	report(Skill)	