# Power Electronic II
# 2015-2016
# AC-AC Voltage Controllers

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| **Lecture 7** | **3-ph Full Wave AC Voltage Controller Star Connected Load ( Resistive) + How Circuit Operates + Drawing phasor diagram and waveforms of 3-phase system** | **Monday 19-10-2015 Dr. Khaled** |
| **Lecture 8** | **3-ph Half Wave AC Voltage Controller Star Connected Load (Resistive)+ Drawing phasor diagram of 3-phase system & all relations for theses phasors+ How can draw waveforms of Va, 0.5Vab, 0.5Vac + determine the instant of triggering for all SCRs + determine the conduction period of SCRs and Diodes at Given Firing Angle Of SCR1+**<br>**Example: at Alpha=30,380V (rms), 50Hz, Y-connected R-load of 5Ohm ….determine:**<br>**(a) draw waveform of Vao,**<br>**(b) expression of Vao,**<br>**(c) value of Vao at wt=15,30,45,75,135 deg,**<br>**(d) Max. applied voltage on SCR1,**<br>**(e) RMS Value of output phase voltage (Vao(rms)),**<br>**(f) Load Power,**<br>**(g) source power factor,**<br>**(h) waveform of iao** | **Wednesday 21-10-2015 Dr. Emad** |