

### AE 658 Intake, Nozzle, Powerplant Design projects

No.	Group	Topics suggested ( <i>small deviations from the suggested topic is allowed</i> )
1		Subsonic Intake for large subsonic passenger airliner (Flt M.No.0.85)- BPR>5.0 - Intakes for fan and LPC are to be designed
2		Subsonic Intake behind a Turbo-prop – or Open rotor engine flying at Flight M.No.=0.8
3		Supersonic Intake for M=1.5 combat aircraft (BPR<1.0) – Intake at aircraft nose -engine fuselage buried-single engine aircraft
4		Supersonic Intake for M=2.0 MRCA (BPR<1.0) – Side Intakes-engine fuselage buried-twin engine aircraft – possibly serpentine intake
5		Supersonic Intake for M=2.0 passenger/transport (BPR<2.0) – engines wing mounted
6		Nozzle design for subsonic passenger (100 pax) airliner engine (M=0.85) – with noise suppression devices and variable geometry- medium bypass (BPR=3) mixed flow engine
7		Vectored thrust nozzle for a MRCA for an aircraft with flight M=1.8 (low BPR engine)
8		Vectored thrust nozzle for a VTOL aircraft for marine application (on an aircraft carrier) – [don't copy Sea Harrier]