The engineering process

1. The problem – external (the client), internal – you, the boss, lecturer
2. Define success – technical performance criteria, constraints (time, cost, finance, laws)
3. Find solutions – the team, research, problem solving
4. Test – rigorous analysis of solutions: sketch, calculations, prototype, computer model
5. Decide – present, reports, debates
6. Build and deliver – project management, the team, finance, intellectual property
7. Operate, optimise, maintain trouble shoot
8. End of life, sustainability – recycle, dismantle, sustainability