



COLLEGIATE DESIGN SERIES
COLLEGIATE ROADSHOW

PROJECT MANAGEMENT

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Project Management

- Organization
- Planning
- Execution

Planning

- What?
- When?
- How?

Planning

- What?
 - Goals & Objectives
- When?
 - Timing
- How?
 - Processes

Planning - The What?

Goals

- Review of 2006 Goals
- 2007 Goals

Planning - The What?

- Review of 2006 Goals
 - What were the 2006 Goals?
 - What went right-went wrong this past year?
 - Where are the reports on the design and development of the 2006 car?

Planning - The What?

2007 Goals

- Team Goals
- Systems goals
- How do the team plan to reach these goals?
- What changes are needed?

Goals must be realistic. Stretch is OK, but...

Planning - The When?

- Major Milestones
 - All major design decisions made
 - All parts ordered
 - Dyno testing complete
 - Car complete and running
- Systems Milestones
- Detailed timing
- Gantt Charts
- Murphy's Law
- The Law of Pi

Basic Gantt Chart

Security and Access Control System

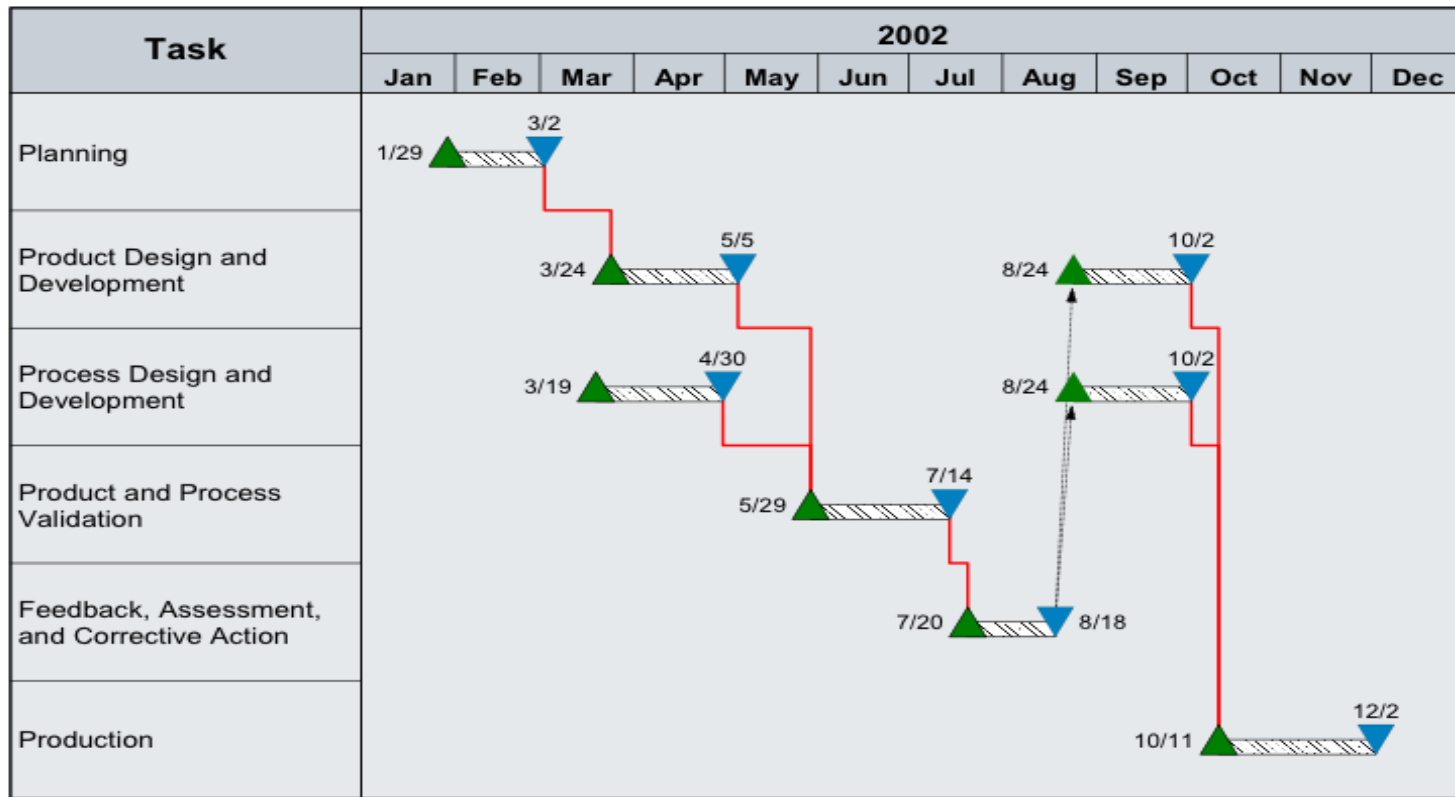
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P-R-O-J-E-C-T	2000			2001									R-E-S-P
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
ENGINEERING													ENGINEERING
Site Survey	18												Marwell Engineering
Draft Survey Results	18												Marwell Engineering
GMBH Review			4										Lost Creek Point Mgmt
Survey RPT (Final)				1									Electrical Contractor
GMBH RFV Approval				3									Lost Creek Point Mgmt
System Design					14								Marwell Engineering
HMBC Review						20							Electrical Contractor
Bid and Award							4						Marwell Engineering
Construction Support								27				5	Marwell Engineering
CONSTRUCTION													CONSTRUCTION
Buy Cable Conduit							24						Electrical Contractor
Install Cable								2					Electrical Contractor
Procure Hardware							24						A & J Security
Install Hardware								21					A & J Security
Deliver Console								9					A & J Security
Load Data									13				Lost Creek Point Mgmt.
Configure Software									1				A & J Security

Gantt Chart with Dependencies

Product Development Schedule Phase One

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Planning - The When?

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Planning, The How?

Processes

- Organization in place?
- Decision Process
- Design Process
- Review Process
- Monitoring Process
- Contingency Plans
- Knowledge Transfer Process

The Execution of the Plan

- Team organization
- Processes
- Monitoring
- Communications
- Contingency plans
- Discipline

The Execution of the Plan

- Execute the Agreed Processes
 - Design Process
 - Decision Process
 - Review Process
 - Monitoring Process
- Recovery Plans
- Contingency plans

The Execution - Communications

- Communication is a key
- Put things in writing
- Record key decisions
- Team meetings - how often, how organized?
- The “Book of Knowledge”

Execution - Discipline

- Mandatory!!

“Royce Rules”

- The 2 “T’s”, Teamwork & Timing
- Respect
- Honesty
- Discussion but no dissention
- Fess up early
- Blame gets us nowhere
- Communicate
- Put important things in writing
- Confirm
- Don’t miss major milestone dates
- Discipline, Discipline, Discipline