

Suggested FTRC Schedules

Each suggested schedule provides you with a list of FTRC activities, short description of that activity and resources you use to implement it. Resource type and names are abbreviated as listed below.

| # | Suggested Schedule | Description | Pages |
|----|--|---|---------|
| 1 | Full-Year Club, Competitive FTRC Team | Meeting once per week; Overview of the Example Team Plan | 21 |
| 2 | Full Year Course | 48 x 90 min sessions (24 active weeks with 2 sessions per week) | 22 - 25 |
| 3 | Race Engineering | Pit Crew: Optimize the Chassis for performance. | 26 - 28 |
| 4 | Upside Down Wings | Optimize aerodynamics by adding wing(s) using 3D CAD and mechanical engineering principles. | 29 |
| 5 | Design on the FastTrack | Optimize aero with a new car body using 3D CAD. | 30 |
| 6 | Lower Control Arm | Apply mechanical engineering principles and use 3D CAD to redesign the lower control arm. | 31 |
| 7 | Chassis Underplate: Simple & Advanced | Apply mechanical engineering principles and use 3D CAD to modify the chassis underplate. | 32 - 33 |
| 8 | Alternative Energy Battery Chargers: Wind, Solar | Live a sustainable future and recharge your FTRC car with wind power or solar power. | 34 - 35 |
| 9 | Physics Lessons & Math Lessons | Actively address standards-based physics and math lessons using FTRC | 36 - 37 |
| 10 | FTRC for Middle Grades | Framework for upper middle grades | 38 - 40 |
| 11 | Marketing & Project Management | Marketing schedule and project management schedule | 41 - 42 |
| 12 | Other Project suggestions | Available for download at the FTRC Team Web Site | 43 |

Resource Abbreviations

Resource Types

- MBB: MindBug Buster activities available for download at the team web site (read about these in the Fundamentals section of this book)
- PPT: PowerPoint presentation available for download at web site; also available in PDF format
- HDT: Handout available for download at web site
- VID: Video available for viewing at the web site
- See Below: Printed content in FTRC Booklets 1 - 9; electronic versions also available at web site.
- MID: Printed content in FTRC Booklet for Middle Grades. This booklet provides a full series of activities that can be implemented independently of all other FastTrack RC content.

FastTrack RC Booklet Initials

- CURR: Booklet #1, Curriculum & Fundamentals (this book!)
- MKPM: Booklet #2, Marketing & Project Management
- PCLB: Booklet #3, Pit Crew Logbook
- AERO: Booklet #4, Aerodynamic Team Guide
- MECH: Booklet #5, Mechanical Engineering
- PITN: Booklet #6, P.I.T. Now (Alternative Energies)
- RACE: Booklet #7, National FTRC STEM League Handbook
- SCI: Booklet #8, Science Extension Lessons
- MATH: Booklet #9, Math Extension Lessons
- MID: Booklet for Middle Grades, alternative collection of lessons and resources

Web site = FTRC team web site
at <http://mindbug.mrooms.net>