TECH TREE

1. CONSTRUCTION: 19

1. 3
- **Troop IIIa, Armoured Tanks:** +1 acc, 10% vsDeath, 20% vs a second target, 1 free shot.
- **Missile Defence I, Anti Missile:** 30% vs enemy missile

2.8
- **Space Station II, Trade Hub:** Destroyers, +1 supply and unit capacity. +1 CR/station

3.12
- **Missile Defence II, Auto targeting:** 50% vs enemy missile
- **Troop VI, Power Armour.** Stacks: +2 def, 20% avoid death, Outposts on various planets. GIN

4.18
- **Bomb Shelters I, Planetary Bomb Shelters:** 1st bomb fails, +1 troop def, 30% vs bombs.
- **Troop VI, Ground Fighter support. Stackable:** 20% destroys incoming transports, +1 troop def.

5.25
- **Space Station III: Star Fortress:** +2 supply range and unit capacity. Build Large and Huge ships. 1 Free shot. Store ships (see GIN)

6.35
- **Special I, Mines:** 30% enemy takes 1 dmg.
- **Ship I, Improved Design:** +1 tech slot, +2 ship cost. +2 transport capacity.
- **Bomb Shelters II, Deep Core Vaults:** +3vs bombing. 50% survive hit. +3 troop def. 20% vs death.

7. 46
- **Ship IIa, Troop pods.Medium:** Carry 1 troop/ ship.
- **Ship IIb, Fighter Bays.Large:** Carry 1 scout/ship. Cost +1. GIN
- **Ship IIc, Supply Bays. Large.:** Carry 1 Supply point. Cost +1.

8.58
- **Troop IX, Mech Bots:** Level 1 troop. GIN.
- **Ship IV, Cruiser:** Build Large ships.
- **Planet IV: Artificial Planet:** Construct planets. See GIN.

9.80
- **Space Station IV Galactic Citadel:** Adds pop., supply, and more. See GIN.
- **Ship V, Peace Maker:** Build Huge Size Ship. Also treat as Transport. See GIN.

2.POWER: 12

1. 6
- **Farm I, Food Replicators**: Act. + 2FP
- **Production I, Advanced Mechanics:** +2 LP Act.

2. 10
- **Engine I, Nuclear drive:** +1 MP.
- **Bomb I, Nuclear Bomb:** medium- +2 bombing.

3.25
- **Production IIa, Advanced planning:** +2 unit capacity in any system.
- **Production IIb, Adv Components:** Act. +5LP
- **Production level II, Auto Factory:** Pot. +1LP /Colony.

4.40
- **Bomb II, Plasma bomb. Large.:** +2 bombing, +50% splatter dmg. GIN
- **Engine II, Plasma Drive:** +2 MP, -1 supply cost.

5. 55
- **Engine III, Anti Matter Drive-** +3MP. -1 supply cost, +2 cost. GIN
- **Bomb III, Anti-Matter Bomb.** Medium.: +3 bombing, 2 dmg.

6.70
- **Engine IV, Time-phase Drive:** +5 MP,. -2 supply cost. +3 cost.
- **Special II, Dark Space Teleporter-** all tiles cost 1 MP.
- **Production V, Deep Core Mining** +1LP/ labourer.

3.CHEMISTRY: 12

1.6
- **Armor I, Tritanium Armor:** 20% soak 1 dmg
- **Fuel Cells I, Uranium Fuel Cells:** +1 system range

2.10
- **Missile I, Repulse Missile.** Medium: 20% vs jamming.
- **Armour II, Nano-Mesh Construction**: 40% soak 1 dmg, 20% missile hit armour for no dmg.

3.25
- **Fuel Cell II, Nuclear Fission Cells:** +2 system range, +1 MP
- **Armour III, Zortium Armor:** 60% soak 1 dmg, 40% 2nd, 30% vs missile.

4.40
- **Missile II, antimatter.** Medium: +1 dmg, 30% vs jamming.
- **Bomb III, Planet Buster.** Large: +4 boming, 4 dmg.

5.55

4.CULTURE: 13

1.4
- **Social Ia, Military Academy:** +1 troop acc + def.
- **Socisal Ib, Space Academy:** +1 ship acc and def.

2.8
- **Social II, Solar University:** All jobs +1 pot./system.
- **Economics I, Solar Market Place:** +3 CR/Trade agreement, other party gets +2CR. +1 CR/system with colony.

3.15
- **Special: Troop Reserves:** Acts as a troop on each colony- see GIN.
- **Special: Space Reserves:** acts as a scout/ colony- see GIN.

4. 25
- **Economics II, Black Diamond Standard:** +1 CR/ Colony.
- **Social III-Moral Code:** +2 on morale die rolls, +2 intel def. -2 morale costs.

5.38
- **Culture I, Classical Philosophy:** +1 GA card at start of each round.

6.52
- **Prod. IV, Adv. Thermo Dynamics:** +1 Act LP/Colony. Stacks.
- **Science IV, Classic Historic studies**: +1 Act. RP/Colony. Stacks.
- **Farm IV, Adv. Micro Biology:** +1 Act. FP/ Colony. Stacks.

7.68
- **Economic III, Galactic Report:** +3 CR/ Colony.
- **Social IV, Classical Mystaphysics Achievement:** +1 GA Card. Stacks. GIN.
- **Culture II, Religious Enlightenment- Achievement**: Greatly aids colonies.

5.COMPUTERS: 13

1.6
- **Computer I, Adv. Ranged Computers:** +1 Acc, +1 range on all sides.
- **Science I, Adv. Arch. Techniques:** Pot. +1 RP/ Colony.

2.12
- **Intel I, Adv. security scanners:** +1 Intel. +2 rebellion rolls, attack and def.
- **Comp.II, Optronic Computers.** Medium. +2 acc, +1 range on all sides.
- **Science II, Adv. Data Compression:** +2 Act. RP/ Treaty, +7 RP pot.

3.21
- **Social IV, Holograph Training:** +1 morale rolls, +1 troop and ship acc, +1 all jobs (pot). See GIN.
- **Computer III: Neural Interfacing:** +4 acc, attack range: +3 frwrd, +2 sides, +1 back. Med.

4.35
- **Science III, Holographic Libraries:** +1RP/System Act. Stacks:
- **Special III, Structural Analyzer:** 50% ignore Armour Points.
- **Intel II, Cyber-Security:** +2 intel rolls and rebellions. Stacks. GIN.

5.50
- **Missile Defence IV :** 60% vs missile.
- **Computer IV, Adv. AI Network.** Large.: +6 acc, rng: +4 frwrd, +3 sides, +2 back.
- **ScienceV, Galactic Cybernet :** +1RP Act/ scientist.

6.BIOLOGY: 10

1.4
- **Farm II, Adv. Farming techniques.** +1 FP/Colony Pot.
- **Planet Ia, Mineral Extraction.** +1 LP/ Colony Pot.

2.10
- **Planet IIIb, Weather Control**: Colonize Toxic planets.
- **Farm III, Subsurface Farming**. Act.: +3 FP

3.18
- **Planet V, Atmospheric Dwellings:** colonize Gas planets. GIN.
- **Farm V, CarboMeth Diliation**. Act +5FP.

4. 32
- **Planet VII, Terraforming:** Greatly improves Colonies.

5.48
- **Special V, Adv. Medicine Achievement:** +Greatly aids empire, and stops illness. GIN.
- **Farm V, Celestial Gardening –Achv:** Greatly enhances a colony. GIN

Right column

6.60
- **Planet VIII, Gaia Transform, Achv** : changes all colonies into Terra type planets. GIN.

7.PHYSICS: 18

1.3
- **Beam I, Adv. Laser Cannon.** Small/ Med +1 acc, -2acc/1 square- See GIN.
- **Troop I, Laser Rifle:** +1 acc.
- **Scanner I: Base Scanner:** +1 acc. See one tech slot. See GIN.

2.6
- **Beam II, Fusion Beam:** +1 acc, 30% bypass armour, -2acc/ 1 square.
- **Troop IIIa, Fusion Rifle** : +1 dmg, +2 acc, -1 enemy def.

3.12
- **Comms I, Particle Comm's:** +1 ship and comm range.
- **Scanner II, Particle Scanners.** Medium: +2 acc, see 2 tech slots. Avoids dangers. See GIN.
- **Beam III, Partical Beam:** 40% bypass armour, 30% kill onboard troops, -1acc/1 square.

4.20
- **Beam IV, Phasor Beam:** +1 acc, 2 shots/action, -1acc/2squars.
- **Troop VIIa, Phasor Rifle:** +3 acc, +1 acc vs tanks and power armour.

5. 32
- **Comms II, Hyper. Comms.:** +1 ship range, +2 ship supply and comm range. Stacks. GIN
- **Scanner III, Battle Scanner:** See 3 slots. Asteroid fields. See GIN.

6. 43
- **Beam V, Plasma Cannon.** Large: +1 dmg, 40% splatter dmg (1dmg). 20% bypass armour. -1 dmg + acc/2squares.
- **Troop VIIIa, Plasma Rifle:** +1 dmg, +2 acc, 40% splatter to another troop. See GIN.

7. 55
- **Beam VI, Dissipater Beam:** +1 dmg, +4acc, 80% bypass armour. No dissipation.
- **Troop X, Troop Gate:** Move troops to other colonies. See GIN.

8.70
- **Special IV, Mass Warp Conduit:** Faster movement between colonies. See GIN.
- **Beam VII, Astral Projector.:** +2 dmg, bypass armour, 3 shots. Destroys planets… See GIN.

8.FORCE FIELDS: 17

1.4
- **Shields I, Alpha Class:** +1 beam def, 40% vs 1 beam dmg. See GIN
- **Missile Defence II, Electro Field:** 40% vs missile, 30% vs missile dmg. GIN.
- **Planet II, Colony shields:** Outposts and colonies on Radiation planets. GIN.

2.8
- **Mass Driver II, Shrapnel shot**. Medium: +1 acc, frwrd only, shot spreads to other ships. GIN.
- **Planet IIIa, radiation shield :** Colonize Radiation planets and reduce negs. Stacks. GIN.

3.15
- **Planet IV, Planetary Shields:** +2 bomb def, chance troops cannot land on planet. Colonize asteroids… GIN.
- **Troop IIIb Personal Shield:** +2 troop def, chance to avoid death. GIN.

4.25
- **Mass Driver III. Gausse Cannon**. Medium:+1 acc, 2 shots.
- **Troop VII b, Gausse rifle:** +3 acc, 2 shots.

5.38
- **Shields II, Delta Class.** Medium: +2 def vs beama dn +1vs mass driver. Soaks damage. GIN.
- **Intel III, Stealth Suit:** +2 intel rolls. Recover intel. GIN.
- **Planet VI, Atmosphere Renewer:** Removes radiation and toxic negs. GIN.

6.52
- **Missile Defence IV, Multi-Wave Jammer Field.** Large. : 70% vs missile, soaks damage. GIN.
- **Mass driver IV, Uranium Rounds.** Medium.: +1 dmg, +1 acc, 50% bypass armour.
- **Troop VIIIb, Condensed Uranium Ammunition:** +2 dmg, +4 acc, 40% bypass armour. Ignore avoid death.

7.65
- **Shields III, Omega Class** Large: Greatly defends vs beam and mass driver attacks. Soaks damage of Astral projector. GIN.
- **Mass Driver V, Mason Cannon:** +12 acc, +2 dmg, 80 bypass armor and ship. GIN.