

## GalCiv Quick Reference (1.22.101)

## 1. Research

Technology	Required Technology	Research Cost	Total Research Cost	Ability	Social Projects	Military Projects
1D Phasing	Instant Communication	200	1170	Weapons Defense	Harmony Generator	None
2D Phasing	1D Phasing	400	1570	Weapons Defense	Virtual Reality Center	None
3D Phasing	2D Phasing Controlled Gravity	1000	3120	Weapons Defense	None	None
4D Entrance	4D Space Phasing	22200	112630	None	None	None
4D Phasing	Spatial Rifts 3D Phasing	2000	7120	Weapons Defense	Omega Power Plant	Extraction Center Zeta
4D Philosophy	Galactic Understanding	15210	108040	Diplomacy	Galactic Guide Book	None
4D Space Phasing	Controlled Wormholes 4D Phasing	23100	90430	None	None	None
4D Transformation	4D Entrance	12200	124830	None	None	None
4D Wormholes	4D Transformation	12100	136930	Diplomacy HitPoints Trade Route	None	None
Advanced Artificial Intelligence	TerraComputers	1000	7120	Research	None	None
Advanced Battle Armor	Dreadnought Technology Exotic Alloys	4000	26840	None	None	None
Advanced DNA Research	Genetic Mapping	500	3220	None	Orbital Hospital	None
Advanced Diplomacy	Diplomacy	800	995	Diplomacy	Cultural Exchange Center	None
Advanced Engineering	Nano-Metal Composition	400	950	None	None	Stellar Wake
Advanced Interstellar Manufacturing	Zero Gravity Manufacturing	400	1600	None	None	Interstellar Distributor Mark III

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Technology	Required Technology	Research Cost	Total Research Cost	Ability	Social Projects	Military Projects
Advanced Repair	Shields Basic Repair	750	2300	Repair	Micro Repair Bots	None
Advanced SigINT	Ultra Computers	1400	13520	Espionage	None	None
Advanced Slavery	Hyper Computers	5510	14630	Production	Artificial Slaves	None
Advanced Trade	Trade	900	1225	Trade Route	Galactic Stock Exchange Economic Exchange	Shopping District
Alliances	Instant Communication Diplomacy	1000	2115	Diplomacy	None	None
Anti-matter	Impulse Drive	500	950	None	None	Inverse Tractor Beam
Antimatter Weapons	Hyperspace Mega Phasers	1000	7020	Soldiering	None	None
Artificial Gravity	Propulsion Theory	200	250	None	None	Mining Headquarters
Artificial Life	Replication	5420	17990	Population Growth Morale	None	None
Artificial Planets	Artificial Satellites	2000	11620	Influence	Omega Quality Control	None
Artificial Satellites	Large Scale Building	5000	9620	Influence	Historical Preserve Omega Shipyard	Massive Scaling Center
Avatar Technology	Ranger Technology Self Healing Armor	17000	73640	None	Omega Defense System Starbase Resupply Capital	Avatar Avatar Killer
Basic Environment Control	Medical Theory	220	270	Population Growth	Habitat Improvement Aphrodisiac	None
Basic Logistics	Industrial Theory	300	350	None	Logistics Management Center	None
Basic Repair	Nano-Metal Composition Industrial Theory	250	800	Repair	None	None
Battle Armor	Defense Theory	100	150	None	None	None

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Technology	Required Technology	Research Cost	Total Research Cost	Ability	Social Projects	Military Projects
Battleship technology	InterStellar Tactics Warp Drive Artificial Gravity	4500	8920	None	Starbase Resupply Center	Battleship Combat Transport Death Knight Barriers Battle Stations Mark II
Benevolence	Cultural Focus Hyperspace	1000	7675	Trade Route	None	None
Beyond Human	Galactic Creation	251100	723010	None	None	None
Brain Wave Mapping	Nano-Frequency Electronics Zero Gravity Research	400	1120	None	Virtual Reality Modules	None
Cloaking	Planetary Defenses Dreadnought Technology	5000	28990	None	None	Phoenix
Cold Fusion	Propulsion Theory	100	150	None	None	Mining Barracks Stationary Turrets
Communication Theory	None	50	50	None	News Network	None
Conglomerates	Trade Organizations	3200	7225	Trade Route	None	None
Controlled 4D Wormholes	4D Wormholes	23100	160030	Diplomacy HitPoints Trade Route	None	None
Controlled Gravity	Artificial Gravity	300	550	Range	Gravity Accelerators Advanced Quality Control	Satellite Waterpark
Controlled Wormholes	Star Creation	10900	60430	Speed	None	None
Corvette Technology	Photons Phasers	400	820	None	None	Corvette Fusion Cannons
Cultural Conquest	Cultural Maximizing Interspecies Philosophy	5000	29725	None	Hyper Distribution Center Spin Control	Party Palace
Cultural Focus	Interstellar Capitalism	1000	3825	Trade	None	Franchise Headquarters

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Cultural Maximizing	Xeno Propaganda	4000	7825	None	None	Culture Palace Culture Palace Framework Culture Palace Base Cultural Maximization Center Culture Palace Structure
Cultural Trade	Advanced Trade	1000	2225	Trade Route	Galactic Exhibition	None
Cure for Depression	Brain Wave Mapping	2000	3120	Morale	None	None
Damage Optimization	Energy Magnification	3000	6820	Weapons	None	None
Defense Theory	None	50	50	None	None	None
Defensive Phasers	Turbo Phasers	250	2620	Defense	None	Battle Hammer
Deflectors	Defense Theory	200	250	None	None	Defender
Diplomacy	Universal Translator	120	195	Diplomacy	Embassy Diplomatic Translators	None
Disruptors	Corvette Technology	1000	1820	Weapons	None	None
Dreadnought Technology	Large Scale Building Battleship technology	9000	21640	None	None	Anti-Matter Missile Dreadnought Battle Stations Mark III Lightning Shield
Drones	Nanobots Sensors	250	1870	None	None	Smart Drones
Energy Channeling	Phasers Shields	220	1270	Weapons	None	None
Energy Focusing	Corvette Technology	1000	1820	Weapons	None	None
Energy Magnification	Energy Focusing	2000	3820	Weapons	None	None
EvolutionControl	TerraForming	42100	62290	None	The Terraformer	None
Excalibur Technology	Near Omnipotence	37000	414710	None	None	Excalibur
Exotic Alloys	High Density Metals	1200	2300	HitPoints	None	None

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Technology	Required Technology	Research Cost	Total Research Cost	Ability	Social Projects	Military Projects
Extravaganza	Interstellar Negotiation	1800	3595	Diplomacy	Stadium	None
Final Frontier	Beyond Human	250000	973010	None	None	None
Galactic Creation	Near Omnipotence	94200	471910	HitPoints	None	None
Galactic Domination Philosophy	Galactic Creation	14100	486010	None	None	None
Galactic Pacifism	Galactic Creation	23100	495010	Diplomacy Influence	None	None
Galactic Understanding	EvolutionControl Interspecies Philosophy	14310	92830	Trade Diplomacy Morale	None	None
Genetic Mapping	Organic Piecing	1000	2720	Research	Tir-Quan Training	None
Gravity Mastering	Controlled Gravity	800	1350	Range	None	None
High Density Metals	Nano-Metal Composition Battle Armor	400	1100	Production	None	None
Hyper Computers	TerraComputers	3000	9120	Research	Omega Research Center	None
Hyper Warp	Hyperspace	500	3350	Speed	None	None
Hyper trade	Hyper Warp Benevolence	2000	10175	Trade Route	Trade Monument	None
HyperSoldiers	EvolutionControl	2400	64690	Soldiering	None	None
Hyperspace	Warp Drive	1000	2850	Speed	Hyperion Manufacturing Center	Hyper Mining Interdiction Beam
Improved Environment Control	Basic Environment Control	320	590	Population Growth	None	None
Impulse Drive	Cold Fusion	300	450	Speed	None	Transport
Industrial Theory	None	50	50	None	Manufacturing Center	Interstellar Distributor
Instant Communication	Nano Electronics Phasers	500	970	Trade Diplomacy	None	None
InterStellar Tactics	Energy Channeling Space Militarization	800	2370	None	None	Frigate

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Interspecies Philosophy	Omni Computers	4420	16950	Diplomacy	None	None
Interstellar Business	Trade	1000	1325	Trade	Ultra Spices	Interstellar Consortium
Interstellar Capitalism	Interstellar Marketing	1000	2825	Trade	Stock Market	None
Interstellar Damage Control	Large Scale Building	1000	5620	Repair	None	None
Interstellar Marketing	Interstellar Business	500	1825	Trade	Restaurant of Eternity	None
Interstellar Negotiation	Advanced Diplomacy	800	1795	Diplomacy	None	None
Interstellar Refining	Industrial Theory Cold Fusion	200	400	None	Fusion Power Plant	Resource Refinery
Large Scale Building	Advanced Engineering 1D Phasing Tri-strontium Alloy	1000	4620	HitPoints	Star Ship Foundry	Advanced Refinery Ultra Mining
Majesty	Extravaganza	4800	8395	Diplomacy	None	None
Majesty Mark II	Majesty	7800	16195	Diplomacy	None	None
Majesty Mark III	Majesty Mark II	7800	23995	Diplomacy	None	None
Master Race	Genetic Mapping	5000	7720	Soldiering Military Production	None	None
Medical Theory	None	50	50	None	Medical Center	None
Mega Phasers	Turbo Phasers	800	3170	Weapons	None	None
Military Design Computers	Avatar Technology Advanced Artificial Intelligence	18400	98440	Repair	None	None
Mind Terror Weapons	Antimatter Weapons	1000	8020	Soldiering	None	None
Molecular Medicine	Genetic Mapping	2000	4720	Soldiering Morale	None	None
Morphing	Replication	300	12870	Soldiering	None	None
Nano Electronics	Communication Theory	120	170	None	None	None

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Nano Mining	Nanobots Drones	1000	2870	Economics Production	None	Nano-Rig Excavation
Nano Rifts	Spatial Rifts	1400	6520	Espionage	None	None
Nano-Frequency Electronics	Nano Electronics	300	470	None	Multimedia Center	None
Nano-Metal Composition	Industrial Theory	500	550	None	Frictionless Clothing Manufacturing Capital Tri-Strontium Steel	None
Nanobots	Nano-Metal Composition Nano-Frequency Electronics	350	1370	Soldiering	Harmony Crystals	Micro-Fighters Dread Drones Phase III Factory
Near Omniscience	Controlled 4D Wormholes 4D Philosophy	35400	283280	Diplomacy Espionage Trade Route	None	None
Near Omnipotence	Near Omniscience	94430	377710	HitPoints Military Production	None	None
Omni Computers	Hyper Computers	3410	12530	Research	Hyper computers Galactic Research Center	None
Organic Armor	Tri-strontium Alloy Organic Piecing	1500	5270	Repair	None	None
Organic Piecing	Nano-Frequency Electronics Zero Gravity Research	1000	1720	Morale	None	None
Overlord Technology	Military Design Computers	20000	118440	None	Hyperion Shipyard	Overlord Overlord Killer Mark II Overlord Killer
Phasers	Weapons Theory	250	300	Weapons	Shipyard	Star Fighter
Photons	Weapons Theory	120	170	None	None	None
Planetary Defenses	Mega Phasers Defensive Phasers	500	3920	None	Planetary Defense	None
Planetary Destruction	TerraForming	5240	25430	None	None	None

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Propulsion Theory	None	50	50	None	None	None
Ranger Technology	Advanced Battle Armor Dreadnought Technology Cloaking	10000	44190	None	Star System Defense	Ranger
Regeneration	Molecular Medicine	10000	14720	Soldiering Morale	Pain Amplifiers Regenerators	None
Reinforced Hulls	Nano-Metal Composition Industrial Theory Deflectors	220	1020	HitPoints	None	None
Replication	Transporters	5000	12570	None	None	Orbital Replicators
Self Healing Armor	Ranger Technology Organic Armor	9400	56640	Repair	None	None
Sensors	Nano Electronics	250	420	None	Eyes of the Universe	Sensor Drone
Shields	Deflectors	500	750	Defense	None	BattleAxe Protection Fields Deflector Shields Advanced Shielding
Smuggling	Trade	4000	4325	Trade Route	None	None
Space Militarization	Battle Armor Deflectors	200	550	None	None	Battle Stations
Spatial Rifts	3D Phasing	2000	5120	None	None	None
Splash Damage	Damage Optimization	4000	10820	Weapons	None	None
Star Creation	Planetary Destruction	24100	49530	None	None	None
Star Democracy	Alliances	2000	4115	Diplomacy	Political Capital	None
Star Federation	Star Democracy	8000	12115	Diplomacy	Galactic Monument	None
StarHawk Technology	Advanced Repair Energy Channeling	500	3320	None	None	Star Hawk
Stellar Cartography	Nano Electronics	100	270	None	None	None

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Technology	Required Technology	Research Cost	Total Research Cost	Ability	Social Projects	Military Projects
TerraComputers	Brain Wave Mapping	5000	6120	Research	Technological Capital Nano Recorders Research Center Info Net	None
TerraForming	Artificial Life	2200	20190	None	Terraforming	None
Terror Star	Artificial Planets	4000	15620	Influence	None	Terror Star-Shell
The Better Way	Interstellar Capitalism	2000	4825	Trade	Trade Center	None
The Dark Side	Xeno Propaganda	1000	4825	Diplomacy	Life Force Power	None
Thought Police	Brain Wave Mapping	1000	2120	None	Secret Police	None
Trade	Diplomacy	130	325	Trade Route	Economic Capital	Freighter Basic Trading Post Advanced Trading Post Trade Center
Trade Organizations	Cultural Trade	1800	4025	Trade Route	None	None
Transporters	Warp Drive Molecular Medicine	1000	7570	None	Teleporters	None
Tri-strontium Alloy	High Density Metals Impulse Drive	500	2050	Production	None	None
Turbo Phasers	Energy Channeling Space Militarization	800	2370	None	None	Battle Cruiser
Ultra Computers	Hyper Computers	3000	12120	Research	Neural Net	None
Unambiguous Communication	Hyper Computers Communication Theory	4500	13620	Diplomacy	None	None
Universal Translator	Communication Theory	25	75	Diplomacy	Banking Center	Foreign Relations Center
Virus Elimination	Genetic Mapping	1000	3720	Morale	None	None
Warp Drive	Anti-matter	900	1850	Speed	None	None
Weapons Theory	None	50	50	None	None	None

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<b>Technology</b>	<b>Required Technology</b>	<b>Research Cost</b>	<b>Total Research Cost</b>	<b>Ability</b>	<b>Social Projects</b>	<b>Military Projects</b>
Xeno Brain Washing	Thought Police Xeno Propaganda	2000	7895	Trade Route	Re-education Center	None
Xeno Intimidation	Trade ID Phasing	1200	2645	Trade Route	None	None
Xeno Manipulation	Brain Wave Mapping Advanced Diplomacy	1200	3265	Diplomacy	None	None
Xeno Propaganda	Interstellar Capitalism	1000	3825	Trade	Propaganda Machine Propaganda Center	None
Xeno Trade Persuasion	Trade Instant Communication	800	2045	Trade Route	None	None
Zero Gravity Manufacturing	Industrial Theory Anti-matter	200	1200	None	Anti-matter Power Plant	Interstellar Distributor Mark II
Zero Gravity Research	Medical Theory	200	250	None	Research Lab	None

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2. Social Projects

Improvement	Required Tech	Research Cost	Cost	Maint	Ability	E c o n o m i c	M a n u f a c t	M o r a l	P l a n e t D	P l a n e t Q	P r e s t i g e	R e s e a r c h	S h i p Q u a l
Advanced Quality Control	Controlled Gravity	550	500	1	None								10
Anti-matter Power Plant	Zero Gravity Manufacturing	1200	300	1	None	5	30						
Banking Center	Universal Translator	75	50	0	None	20							
Cultural Exchange Center	Advanced Diplomacy	995	200	4	None	5		5			25		
Economic Exchange	Advanced Trade	1225	400	0	None	33					5		
Embassy	Diplomacy	195	100	2	None	5		5			10		
Entertainment Network	None	0	35	2	None			20					
Fusion Power Plant	Interstellar Refining	400	50	3	None	10	20						
Galactic Research Center	Omni Computers	12530	400	5	None						10	45	
Habitat Improvement	Basic Environment Control	270	50	0	None					10			
Info Net	TerraComputers	6120	300	4	None	5					1	10	
Manufacturing Center	Industrial Theory	50	100	1	None		25						
Medical Center	Medical Theory	50	100	2	None			5				5	5
Multimedia Center	Nano-Frequency Electronics	470	200	2	None			15					
Neural Net	Ultra Computers	12120	500	5	None	10						25	
News Network	Communication Theory	50	100	2	None	2		5			5		
Omega Defense System	Avatar Technology	73640	800	5	None				100				
Orbital Hospital	Advanced DNA Research	3220	200	3	None			10			5	5	
Planetary Defense	Planetary Defenses	3920	100	4	None				33				
Propaganda Center	Xeno Propaganda	3825	150	4	None			5					
Re-education Center	Xeno Brain Washing	7895	1000	5	None			5					
Research Center	TerraComputers	6120	100	3	None						10	33	
Research Lab	Zero Gravity Research	250	40	1	None						10	25	

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Improvement	Required Tech	Research Cost	Cost	Maint	Ability	E c o n o m i c	M a n u f a c t	M o r a l	P l a n e t D	P l a n e t Q	P r e s t i g e	R e s e a r c h	S h i p Q u a l
Secret Police	Thought Police	2120	100	2	None			5					
Shipyards	Phasers	300	80	1	None								15
Soil Enhancement	None	0	50	0	None				10				
Spin Control	Cultural Conquest	29725	200	5	None			5					
Stadium	Extravaganza	3595	100	2	None	5		20					
Star Ship Foundry	Large Scale Building	4620	400	2	None								25
Star System Defense	Ranger Technology	44190	300	3	None				50				
Stock Market	Interstellar Capitalism	2825	200	1	None	25		10			5		
Teleporters	Transporters	7570	200	2	None	15		25					
Terraforming	TerraForming	20190	1000	0	None				20				
Trade Center	The Better Way	4825	500	0	None	15	15	15			15	15	
Virtual Reality Center	2D Phasing	1570	400	5	None			20					

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3. Super Projects

Improvement	Required Tech	Research Cost	Cost	Maint	Ability	E c o n o m i c	M a n u f a c t	M o r a l e	P l a n e t D	P l a n e t Q	P r e s t i g e	R e s e a r c h	S h i p Q u a l
Harmony Generator	1D Phasing	1170	400	2	None			20					
Hyperion Shipyard	Overlord Technology	118440	1000	5	None								50

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4. Achievements

Improvement	Required Tech	Research Cost	Cost	Maint	Ability	Economic	Manufacturing	Morale	Political	Planetary	Research	Reserve	Ship Quality
Economic Capital	Trade	325	200	0	None	100							
Hyperion Manufacturing Center	Hyperspace	2850	400	0	None		100						
Logistics Management Center	Basic Logistics	350	500	0	Logistics 25		10						
Manufacturing Capital	Nano-Metal Composition	550	200	0	None	10	100						
Omega Power Plant	4D Phasing	7120	500	0	None	50	50						
Omega Quality Control	Artificial Planets	11620	1000	0	None		15						33
Omega Research Center	Hyper Computers	9120	500	0	None						50		
Omega Shipyard	Artificial Satellites	9620	500	0	None								30
Political Capital	Star Democracy	4115	150	0	None			50		100			
Starbase Resupply Capital	Avatar Technology	73640	900	0	Logistics 15		15						
Starbase Resupply Center	Battleship technology	8920	600	0	Logistics 15		10						
Technological Capital	TerraComputers	6120	200	0	None						100		

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5. Trade Goods

Improvement	Required Tech	Research Cost	Cost	Maint	Ability	E	M	M	P	P	P	R	S
						c	a	o	l	a	r	e	s
						n	n	r	a	n	s	s	i
						o	u	a	n	t	t	e	p
						m	c	l	e	t	i	a	Q
						i	a	e	D	Q	g	r	u
						c	t				e	h	a
													l
Aphrodisiac	Basic Environment Control	270	500	0	Population Growth 50								
Artificial Slaves	Advanced Slavery	14630	300	0	Social Production 15								
Diplomatic Translators	Diplomacy	195	500	0	Diplomacy 40								
Frictionless Clothing	Nano-Metal Composition	550	510	0	Morale 10								
Galactic Guide Book	4D Philosophy	108040	400	0	Influence 15								
Gravity Accelerators	Controlled Gravity	550	500	0	Speed 20								
Harmony Crystals	Nanobots	1370	470	0	Morale 10								
Hyper computers	Omni Computers	12530	540	0	Research 20								
Micro Repair Bots	Advanced Repair	2300	400	0	Repair 20								
Nano Recorders	TerraComputers	6120	500	0	Research 10								
Pain Amplifiers	Regeneration	14720	1000	0	Influence 20								
Regenerators	Regeneration	14720	500	0	Population Growth 50								
Tri-Strontium Steel	Nano-Metal Composition	550	600	0	HitPoints 25								
Ultra Spices	Interstellar Business	1325	500	0	Morale 15								
Virtual Reality Modules	Brain Wave Mapping	1120	500	0	Morale 12								

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6. Wonders

Improvement	Required Tech	Research Cost	Cost	Maint	Ability	E c o n o m i c	M a n u f a c t	M o r a l e	P l a n e t D	P l a n e t Q	P r e s t i g e	R e s e a r c h	S h i p Q u a l
Eyes of the Universe	Sensors	420	400	0	Sensors 10								
Galactic Exhibition	Cultural Trade	2225	500	0	Influence 10	30				30			
Galactic Monument	Star Federation	12115	400	0	Influence 10	10				33			
Galactic Stock Exchange	Advanced Trade	1225	500	0	Economics 25	25				25			
Historical Preserve	Artificial Satellites	9620	500	0	Influence 10	10				50			
Hyper Distribution Center	Cultural Conquest	29725	800	0	Influence 33	10				200			
Life Force Power	The Dark Side	4825	1000	0	Economics 25	10				10			
Propaganda Machine	Xeno Propaganda	3825	600	0	Influence 20	10				10			
Restaurant of Eternity	Interstellar Marketing	1825	600	0	Influence 15	10				10			
The Terraformer	EvolutionControl	62290	800	0	Planet Quality 10	10				10			
Tir-Quan Training	Genetic Mapping	2720	600	0	Soldiering 25								
Trade Monument	Hyper trade	10175	500	0	Trade 20	10				10			

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## 7. Military Projects

Ship	Required Technology	Research Cost	Cost	Maint	Ability	Weapon	Max Capacity	H I T  P T S	A T T A C K	D E F E N S E	S P E E D	R A N G E	S R E A N N S G O E R
Anti-Matter Missile	Dreadnought Technology	21640	300	1	Missile	WPhasor		1	100	1	0	0	2
Avatar	Avatar Technology	73640	1000	20		WPhasor		75	14	10	0	0	3
Battle Cruiser	Turbo Phasers	2370	150	5		Laser		20	5	3	2	2	3
Battle Hammer	Defensive Phasers	2620	280	8		Photon		40	6	5	0	1	3
BattleAxe	Shields	750	120	3	Attack	Phasor		30	2	5	0	0	3
Battleship	Battleship technology	8920	500	12		Photon		50	9	4	0	0	3
Colony Ship	None	0	50	0	Colonize			10	0	1	2	1	3
Combat Transport	Battleship technology	8920	120	6	Troops	Photon	5000	100	0	10	0	3	3
Constructor	None	0	200	1	Starbase			100	0	1	1	3	5
Corvette	Corvette Technology	820	50	1	Attack	Photon		12	3	2	3	2	3
Death Knight	Battleship technology	8920	750	18				60	10	5	0	1	3
Defender	Deflectors	250	55	1		Phasor		25	1	3	0	0	3
Dreadnought	Dreadnought Technology	21640	550	18		Photon		50	12	8	1	0	3
Excalibur	Excalibur Technology	414710	3000	40		WPhasor		300	80	20	10	4	5
Freighter	Trade	325	50	0	Trade			1	0	1	1	6	4
Frigate	InterStellar Tactics	2370	200	10	Attack	Photon		45	5	4	2	2	3
Overlord	Overlord Technology	118440	1800	25		WPhasor		120	20	12	2	1	4
Phoenix	Cloaking	28990	200	6		Laser		20	12	1	2	2	4
Ranger	Ranger Technology	44190	800	20	Survey	Photon		60	12	9	3	1	5
Scout	None	0	30	1				1	0	1	3	3	5
Sensor Drone	Sensors	420	30	0				1	0	1	1	5	8
Star Fighter	Phasers	300	50	1		Laser		10	3	1	3	2	3
Star Hawk	StarHawk Technology	3320	200	0	Survey	Photon		60	2	1	2	4	5
Starbase	Built by constructor	0	10	0				100	0	3	0	0	5

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Ship	Required Technology	Research Cost	Cost	Maint	Ability	Weapon	Max Capacity	H I T  P T S	A T T A C K	D E F E N S E	S P E E D	R A N G E	S R E A N N S G O E R
Survey Ship	None	0	200	0	Survey	Laser		40	0	1	2	4	5
Transport	Impulse Drive	450	75	2	Troops		1000	20	0	4	0	1	3

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## 8. Starbase Modules

Starbase Modules	Required Technology	Research Cost	Required Module	Ability
Advanced Defense	None	0	Basic Defense	StarbaseDefense +2
Advanced Refinery	Large Scale Building	4620	Resource Refinery	Mining +7
Advanced Shielding	Shields	750	Deflector Shields	StarbaseDefense +2
Advanced Trading Post	Trade	325	Basic Trading Post	Trade +15
Avatar Killer	Avatar Technology	73640	Barriers	StarbaseDefense +10
Barriers	Battleship technology	8920	Advanced Shielding	StarbaseDefense +3
Basic Defense	None	0	None	StarbaseDefense +5
Basic Trading Post	Trade	325	None	Trade +10
Battle Stations	Space Militarization	550	Stationary Turrets	AttackAssist +1
Battle Stations Mark II	Battleship technology	8920	Battle Stations	AttackAssist +2
Battle Stations Mark III	Dreadnought Technology	21640	Battle Stations Mark II	AttackAssist +3
Cultural Maximization Center	Cultural Maximizing	7825	None	Culture +33
Culture Palace	Cultural Maximizing	7825	Culture Palace Structure	Culture +50
Culture Palace Base	Cultural Maximizing	7825	Culture Palace Framework	Culture +20
Culture Palace Framework	Cultural Maximizing	7825	None	Culture +20
Culture Palace Structure	Cultural Maximizing	7825	Culture Palace Base	Culture +30
Deflector Shields	Shields	750	Basic Defense	StarbaseDefense +2
Dread Drones	Nanobots	1370	Micro-Fighters	AttackAssist +2
Extraction Center Zeta	4D Phasing	7120	Nano-Rig Excavation	Mining +15
Foreign Relations Center	Universal Translator	75	None	Culture +10
Franchise Headquarters	Cultural Focus	3825	Interstellar Consortium	Culture +30
Fusion Cannons	Corvette Technology	820	Stationary Turrets	AttackAssist +1
Hyper Mining	Hyperspace	2850	Mining Headquarters	Mining +8
Interdiction Beam	Hyperspace	2850	None	SlowEnemies +1
Interstellar Consortium	Interstellar Business	1325	None	Culture +10
Interstellar Distributor	Industrial Theory	50	None	ProductionAssist +5
Interstellar Distributor Mark II	Zero Gravity Manufacturing	1200	Interstellar Distributor	ProductionAssist +10
Interstellar Distributor Mark III	Advanced Interstellar Manufacturing	1600	Interstellar Distributor Mark II	ProductionAssist +15

## GalCiv Quick Reference (1.22.101)

Starbase Modules	Required Technology	Research Cost	Required Module	Ability
Inverse Tractor Beam	Anti-matter	950	None	SpeedAssist +1
Lightning Shield	Dreadnought Technology	21640	Barriers	StarbaseDefense +6
Massive Scaling Center	Artificial Satellites	9620	Phase III Factory	ProductionAssist +25
Micro-Fighters	Nanobots	1370	Fusion Cannons	AttackAssist +1
Mining Barracks	Cold Fusion	150	None	Mining +3
Mining Headquarters	Artificial Gravity	250	Mining Barracks	Mining +6
Nano-Rig Excavation	Nano Mining	2870	Mining Headquarters	Mining +10
Orbital Replicators	Replication	12570	None	ProductionAssist +15
Overlord Killer	Overlord Technology	118440	Barriers	StarbaseDefense +20
Overlord Killer Mark II	Overlord Technology	118440	Overlord Killer	StarbaseDefense +30
Party Palace	Cultural Conquest	29725	Culture Palace	Culture +100
Phase I Factory	None	0	None	ProductionAssist +5
Phase II Factory	None	0	Phase I Factory	ProductionAssist +10
Phase III Factory	Nanobots	1370	Phase II Factory	ProductionAssist +25
Protection Fields	Shields	750	None	DefenseAssist +1
Repair Bay	None	0	None	RepairAssist +1
Resource Refinery	Interstellar Refining	400	None	Mining +5
Satellite Waterpark	Controlled Gravity	550	Shopping District	Culture +25
Shopping District	Advanced Trade	1225	Foreign Relations Center	Culture +15
Smart Drones	Drones	1870	None	ProductionAssist +10
Stationary Turrets	Cold Fusion	150	None	AttackAssist +1
Stellar Wake	Advanced Engineering	950	None	SpeedAssist +1
Terror Star	None	0	Terror Star-Core	TerrorStar +30
Terror Star-Bridge	None	0	Terror Star-Shell	TerrorStar +20
Terror Star-Core	None	0	Terror Star-Bridge	TerrorStar +35
Terror Star-Shell	Terror Star	15620	None	TerrorStar +15
Trade Center	Trade	325	Advanced Trading Post	Trade +25
Ultra Mining	Large Scale Building	4620	Hyper Mining	Mining +9