Company : **Agnikul Cosmos**

Company Name : **Agnikul Cosmos**

Nature Of Business : **Manufacturing**

Designation : **Space Robotics and Controls Engineer**

Tentative Job Location : Chennai

Description :

Space Robotics and Controls Engineer Eligibility We strongly prefer working with individuals who are passionate about aerospace and are willing to work with us for the long term. WHAT IT TAKES • If you like to think the other extreme of the north pole is north "zero" - this is for you. • If you don't need someone to tell you LQR is good enough - this is for you. • If you believe lead-lag compensation is the essence of all human interactions - this is for you. RESPONSIBILITIES • Works on independent sections of controller design and integration process for launch vehicle control systems and related components in the vehicle's guidance systems. • Specifically, o Aid in the development of Autopilot linear stability testing and analysis. o Design Non-linear 6DOF simulation analysis and scenario analysis. o Review system level and launch vehicle requirements. o Lead development and maintenance of software tools that predict pre-flight performance under nominal, off-nominal conditions. o Perform post flight verification of simulation predictions and Monte Carlo through multiple flight conditions. o Create hazards assessment programs and tools to understand probability of impact and expected damage from off-nominal and failure modes. o Support design reviews and milestones as necessary. • Assists independent sections of propulsion control systems. • Aid specifically, the development of some or all of the following. o Design of Mixture ratio control & stability analysis. o Integration of mixture ratio control, electric motor speed control and propellant utilization loops. o Development of system level requirements for cross coupled dynamics between propellant utilization algorithms and vehicle guidance / autopilot algorithms. o Support design reviews and milestones as necessary. • Supports hardware design & implementation of the vehicle across multiple control systems. o Analog and mixed signal design with focus on launch vehicle hardware. o Board level design for both ground checkout systems and flight hardware. o Support design reviews and milestones as necessary. BASIC QUALIFICATIONS • Bachelors / Master's Degree in Controls Engineering, Electrical engineering, Electronics & Communications engineering. • Highly developed computer skills using EE design/analysis software. • Decent software programming skills. PREFERRED SKILLS AND EXPERIENCE • Ph.D. in Electrical engineering, Electronics & Communications engineering. • Good understanding of product development and Control network (CAN). • 1+ experience with mechanical systems and engines. • Good understanding of engine controller design and implementation. • Good understanding of orbital mechanics, multi-body dynamics, and controls-structures interaction. • Experience with static constrained optimization, calculus of variations, dynamic optimization, maximum principle. ADDITIONAL REQUIREMENTS • Must be available to work extended hours and weekends as needed. What you could take away? • Your work will directly impact the company's (and the rocket's) trajectory. • You will learn rocket science from some of the most senior and respected minds in ISRO. • You will work on shaping space policy in India. • You will dirty your hands in a global supply/chain optimization problem.

Location: Chennai, India

Employment Type: Full Time

Eligibilty :

Program	AE	BSBE	CE	CHE	CSE	EE	ES	ME	MSE	PHY	CHM	MTH	ECO	DES	IME	CGS	HSS	EEM	MSP	NET	PSE	Stats
BT	Yes	Yes	Yes	Yes	Yes	Yes	--	Yes	Yes	--	--	--	--	--	--	--	--	--	--	--	--	--
BS	--	--	--	--	--	--	Yes	--	--	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--	--
MT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	--	--	--	--	--	Yes	--	--	Yes	Yes	Yes	Yes	--
DoubleMajor	Yes	Yes	Yes	Yes	Yes	Yes	--	Yes	Yes	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--	--
dual	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--	--
dualB	Yes	Yes	Yes	Yes	Yes	Yes	--	Yes	Yes	Yes	Yes	Yes	Yes	--	Yes	--	--	Yes	--	Yes	Yes	--
dualC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--
Mdes	--	--	--	--	--	--	--	--	--	--	--	--	--	No	--	--	--	--	--	--	--	--
MBA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	No	--	--	--	--	--	--	--
Phd	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
MSc	--	--	--	--	--	--	--	--	--	Yes	Yes	Yes	--	--	--	--	--	--	--	--	--	Yes
MSR	Yes	Yes	Yes	Yes	Yes	Yes	--	Yes	Yes	--	--	--	--	--	--	Yes	--	--	--	--	Yes	--

Cost to Company :

B.Tech - 15 LPA

M.Tech - 10 LPA

Salary breakup for B.Tech

Salary Components (Break-up)				
Particulars	**No.**	**Monthly**	**Yearly**	**Remarks**
Basic Salary	a	45000	540000	
Dearness Allowance	b	5000	60000	
HRA (House Rent Allowance)	c	25000	300000	
Other Allowance	d	25000	300000	
Special Allowance	e	25000	300000	
LTA (Leave Travel	f	Nil	Nil	

Allowance)				
Gross Salary (a+b+c+d+e+f)	**g**	**1,25,000**	**15,00,000**	**Cost to Company**
Statutory Compliance		-		
Provident Fund (P.F.)	h	1800	21600	Subject to Maximum of Rs. 15,000 (Basic + DA)
Employee State Insurance (E.S.I.)	i	Nil	Nil	
Professional Tax	j	209	2508	
Group Medical and Personal Accident Insurance T&C*	k	406	4872	
TDS (Tax Deducted at Source)	l	13023	156276	
Total Deduction (h+i+j+k+l)	**m**	**15,438**	**1,85,256**	Deduction for PF, ESI, Income and Professional Taxes
Variable Components		-		
Esops (Share,Stock etc.)	n	Nil	Nil	Nil
PLI (Performance Link Incentive)	o	25000	300000	It is purely linked to the performance which will be paid as per the company policy (ONCE A YEAR PAYMENT ONLY)
Bonus (Joining bonus etc.)	p	Nil	Nil	Paid as per the company policy
Total Variable Components (n+o+p)	**q**	25,000	**3,00,000**	
Package Details : **Net Salary - (g-m-q)**	**r**	**84,562**	**10,14,744**	

Salary Breakup for M.Tech

Salary Components (Break-up)				
Particulars	**No.**	**Monthly**	**Yearly**	**Remarks**
Basic Salary	a	26250	315000	
Dearness Allowance	b	2917	35004	
HRA (House Rent Allowance)	c	14583	174996	
Other Allowance	d	14583	174996	
Special Allowance	e	25000	300000	
LTA (Leave Travel Allowance)	f	Nil	Nil	
Gross Salary (a+b+c+d+e+f)	**g**	**83333**	**9,99,996**	**Cost to Company**
Statutory Compliance		-		
				Subject to

Provident Fund (P.F.)	h	1800	21600	Maximum of Rs. 15,000 (Basic + DA)
Employee State Insurance (E.S.I.)	i	Nil	Nil	
Professional Tax	j	209	2508	
Group Medical and Personal Accident Insurance T&C*	k	406	4872	
TDS (Tax Deducted at Source)	l	3265	39180	
Total Deduction (h+i+j+k+l)	**m**	**5,680**	**68,160**	Deduction for PF, ESI, Income and Professional Taxes
Variable Components		-		
Esops (Share,Stock etc.)	n	Nil	Nil	Nil
PLI (Performance Link Incentive)	o		300000	It is purely linked to the performance which will be paid as per the company policy (ONCE A YEAR PAYMENT ONLY)
Bonus (Joining bonus etc.)	p	Nil	Nil	Paid as per the company policy
Total Variable Components (n+o+p)	**q**		3,00,000	
Net Salary - (g-m-q)	**r**	**52,653**	**6,31,836**	

Bond :	**False**
CPI CutOff :	**0.0**
Medical Requirments :	
Resume Shortlist :	**True**
Resume Shortlist Criteria:	**N/A**
Aptitude Test:	**True**
Aptitude Test Duration:	**2 hrs**
Group Discussion:	**True**
Group Discussion Duration:	**2 hrs**
Group Discussion Strength:	**N/A**
Technical Test:	**True**
Technical Test Duration:	**2 hrs**
Technical Interview:	**True**
Technical Interview Duration:	**2 hrs**
Number of	

Techincal Interview Rounds:	**2**
HR Interview:	**True**
HR Interview Duration:	**2 hrs**
Additional Information:	