

## 한국과학기술원 NCS 기반 직무기술서 - 연구직

채용분야	연구직	분류체계	대분류	중분류	소분류	세분류
			19.전기·전자	03.전자기기 개발	03.정보통신기기개발 04.전자응용기기개발	01.정보통신기기하드웨어개발 03.정보통신기기소프트웨어개발 01.전자응용기기하드웨어개발 03.전자응용기기소프트웨어개발
설립이념	<ul style="list-style-type: none"> <li>○ 한국과학기술원법</li> <li>- 깊이 있는 이론과 실제적인 응용력으로 국가 산업 발전에 기여할 고급 과학기술 인재 양성</li> <li>- 국가 정책으로 추진하는 중장기 연구 개발과 국가 과학기술 저력 배양을 위한 기초응용 연구 수행</li> <li>- 각 분야 연구 기관 및 산업계와 연계한 연구 지원</li> </ul>					
KAIST 주요사업	<ul style="list-style-type: none"> <li>○ 교육: 과학기술 글로벌 인재 양성</li> <li>○ 연구: 인류 난제 해결을 위한 연구</li> <li>○ 국제화: 글로벌 리더십 역량 강화</li> <li>○ 창업: 창업혁신 생태계 구축 및 발전</li> </ul>					
성장 동력	<ul style="list-style-type: none"> <li>○ Vision : 국가와 인류, 지구를 위한 독특한 빛깔의 세계 10위권 대학</li> <li>○ Mission: 인류의 행복과 번영을 실현하는 과학기술혁신대학</li> <li>○ QAIST: 창의인재, Post AI 융복합 연구, 글로벌 인재, 기술가치창출, 소통의 신뢰</li> <li>○ 3C Spirit : Challenge, Creativity, Caring</li> </ul>					
담당 업무	<ul style="list-style-type: none"> <li>○ 20~30 GHz 초절전 광대역 빔포밍 RFIC 설계</li> </ul>					
직무수행 내용	<ul style="list-style-type: none"> <li>○ 20~30 GHz 초절전 광대역 빔포밍 RFIC 설계</li> <li>○ 안테나 및 빔포밍 모듈 구현</li> <li>○ 논문 작성 및 학회 참가</li> </ul>					
필요지식	<ul style="list-style-type: none"> <li>○ RF 전자공학에 대한 기초 지식</li> <li>○ 밀리미터파 레이다 시스템에 대한 기초 지식</li> </ul>					
필요기술	<ul style="list-style-type: none"> <li>○ RF 관련 측정 장비(Vector network analyzer, spectrum analyzer) 활용</li> <li>○ 모델링 및 프로그래밍 (Python, Matlab) 기술</li> </ul>					
직무수행태도	<ul style="list-style-type: none"> <li>○ 연구자로서의 지식 탐구욕</li> <li>○ 과제 및 연구 수행의 책임감 및 리더십</li> <li>○ 문제 해결법에 대한 통찰력</li> <li>○ 원칙을 준수하고 청렴한 업무처리 태도</li> </ul>					
직업기초능력	<ul style="list-style-type: none"> <li>○ 직업윤리, 문제해결능력, 정보능력, 기술능력, 의사소통능력, 수리능력, 조직이해능력</li> </ul>					
참고사이트	www.ncs.go.kr, www.kaist.ac.kr					

## NCS-Based KAIST Job Description – Research

Recruitment area	Research	Classification system	Parent category	sub-category	sub sub-category	detailed category
			19.science and engineering	03.Electronics	03.Development of information communication equipment	01.Information communication device hardware development 03. Information and communication device software development
				04.Development of electronic application devices	01.Electronic application device hardware development 03. Electronic application device software development	
Mission	<ul style="list-style-type: none"> <li>○ Korea Advanced Institute of Science and Technology (KAIST) Act - Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development - Carrying out the nation's mid- and long-term R&amp;D, and basic and applied research to foster national competitiveness in science and technology</li> <li>- Providing comprehensive support to research conducted by other research centers and industries</li> </ul>					
KAIST's major businesses	<ul style="list-style-type: none"> <li>○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity</li> <li>○ Research: Support for development of outstanding research projects, acquisition of specialized researchers, advancement of entrepreneurial culture, creation of high value-added intellectual property rights, promotion of technology transfer/commercialization, and development of large-scale, leading projects</li> <li>○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership</li> <li>○ Administration: Provision of administrative and technical service for international students/faculty (Support for operation of a "Korean-English bilingual campus")</li> </ul>					
Growth engines	<ul style="list-style-type: none"> <li>○ Vision: Global Value-Creative World-Leading University</li> <li>- Hub for Fostering Knowledge Creation and Global Convergence Talents</li> <li>- Center for the World-Leading New Knowledge and Technology</li> <li>○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies</li> <li>○ 3C Leadership: Change, Communication, Care</li> </ul>					
Duties and responsibilities	<ul style="list-style-type: none"> <li>○ 20~30 GHz low power, wideband beamforming RFIC circuit design</li> </ul>					
Job performance details	<ul style="list-style-type: none"> <li>○ 20~30 GHz low power, wideband beamforming RFIC circuit design</li> <li>○ Implementation of antenna and beamforming module</li> <li>○ Writing papers and participating in conferences</li> </ul>					
Knowledge required	<ul style="list-style-type: none"> <li>○ Basic knowledge of RF electronics</li> <li>○ Basic knowledge of mmWave radar system</li> </ul>					

Required skills	<ul style="list-style-type: none"><li>○ Utilize RF-related measurement equipment (Vector network analyzer, spectrum analyzer)</li><li>○ Modeling and programming (Python, Matlab) skills</li></ul>
performing duties	<ul style="list-style-type: none"><li>○ Responsibility and leadership in conducting assignments and research</li><li>○ Insights on how to solve problems</li><li>○ Observe principles and conduct business with integrity</li></ul>
Basic skills	○ Professional ethics, problem solving ability, information ability, technical ability, communication ability, numeracy ability, organizational understanding ability
reference site	<a href="http://www.ncs.go.kr">www.ncs.go.kr</a> , <a href="http://www.kaist.ac.kr">www.kaist.ac.kr</a>