

## 한국과학기술원 NCS 기반 직무기술서 - 연구직(연수연구원)

채용분야	연수연구원	분류체계	대분류	중분류	소분류	세분류
			14. 건설	06 도시·교통	02. 교통계획·설계	01. 교통계획 02. 교통설계 03. 교통운영·감리
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>○ (메타버스) 메타버스 환경 설계 및 구축연구</li> <li>○ (메타버스) 메타버스 시스템 기반 교통안전 관련 연구</li> <li>○ (시뮬레이션) 거시적 시뮬레이션(MatSim) 활용 교통분석</li> <li>○ (시뮬레이션) 딥러닝 기술을 활용한 데이터 분석</li> <li>○ (공통) 이외 모빌리티 관련 연구 및 과제참여</li> </ul>					
직무수행 내용	<ul style="list-style-type: none"> <li>○ (메타버스) 메타버스 환경 설계 및 가상의 모빌리티 데이터 분석연구</li> <li>○ (메타버스) 메타버스 기술을 활용한 교통안전 모델 연구</li> <li>○ (시뮬레이션) 거시적 측면의 교통수요 예측연구</li> <li>○ (시뮬레이션) 거시적 측면의 교통수요 예측연구</li> <li>○ (공통) 모빌리티 데이터 수집 및 분석연구</li> </ul>					
필요지식	<ul style="list-style-type: none"> <li>○ 교통안전</li> <li>○ 메타버스 관련 지식</li> </ul>					
필요기술	<ul style="list-style-type: none"> <li>○ 프로그래밍 언어</li> <li>○ 데이터 분석</li> <li>○ 영어작문</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	○ 직업윤리, 문제해결능력, 정보능력, 기술능력, 의사소통능력, 수리능력, 조직이해능력					
참고사이트	www.ncs.go.kr, www.kaist.ac.kr					

## NCS-Based KAIST Job Description – Post-Doctoral Researcher

Recruitment area	Post-doctoral Researcher	Classification system	Parent category	sub-category	sub sub-category	detailed category
			14. Construction	06 City and transportation	02. Traffic planning and design	01. Transportation plan 02. Traffic planning and design 03. Transportation operation and supervision
Mission	<ul style="list-style-type: none"> <li>○ Korea Advanced Institute of Science and Technology (KAIST) Act               <ul style="list-style-type: none"> <li>- Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development</li> <li>- 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> </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               <ul style="list-style-type: none"> <li>- Hub for Fostering Knowledge Creation and Global Convergence Talents</li> <li>- Center for the World-Leading New Knowledge and Technology</li> </ul> </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>○ (Metaverse) Metaverse environment design and construction research</li> <li>○ (Metaverse) research related to Traffic safety based on Metaverse system</li> <li>○ (MatSim) Traffic analysis using macroscopic simulation(MatSim)</li> <li>○ (MatSim) Data analysis using deep learning technology</li> <li>○ (Common) Participation in other mobility-related research and assignments</li> </ul>					
Job performance details	<ul style="list-style-type: none"> <li>○ (Metaverse) Metaverse environment design and virtual mobility data analysis research</li> <li>○ (Metaverse) Research on traffic safety model using metaverse technology</li> <li>○ (MatSim) Traffic demand forecast research(macroscopic aspect)</li> <li>○ (Common) Mobility data collection and analysis research</li> </ul>					
Knowledge required	<ul style="list-style-type: none"> <li>○ Traffic Safety</li> <li>○ Metaverse related knowledge</li> </ul>					
Required skills	<ul style="list-style-type: none"> <li>○ Programming language</li> <li>○ Data analysis</li> <li>○ English Composition</li> </ul>					

Attitude while performing duties	<ul style="list-style-type: none"><li>○ Desire to seek knowledge as a researcher</li><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>

## 한국과학기술원 NCS 기반 직무기술서 - 연구직(위촉연구원)

채용분야	위촉연구원	분류체계	대분류	중분류	소분류	세분류
			14. 건설	06 도시·교통	02. 교통계획·설계	01. 교통계획 02. 교통설계 03. 교통운영·감리
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>○ 빅데이터 전처리</li> <li>○ 데이터 시각화 및 분석</li> <li>○ 이외 모빌리티 관련 연구 및 과제참여</li> </ul>					
직무수행 내용	<ul style="list-style-type: none"> <li>○ 빅데이터 기반 AI모델 학습 및 개발</li> <li>○ 모빌리티 데이터 수집 및 분석연구</li> </ul>					
필요지식	<ul style="list-style-type: none"> <li>○ 교통안전</li> <li>○ 교통데이터에 대한 이해</li> </ul>					
필요기술	<ul style="list-style-type: none"> <li>○ 프로그래밍 언어</li> <li>○ 데이터 분석</li> <li>○ 영어작문</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	○ 직업윤리, 문제해결능력, 정보능력, 기술능력, 의사소통능력, 수리능력, 조직이해능력					
참고사이트	www.ncs.go.kr, www.kaist.ac.kr					

## NCS-Based KAIST Job Description – Researcher

Recruitment area	Researcher	Classification system	Parent category	sub-category	sub sub-category	detailed category
			14. Construction	06 City and transportation	02. Traffic planning and design	01. Transportation plan 02. Traffic planning and design 03. Transportation operation and supervision
Mission	<ul style="list-style-type: none"> <li>○ Korea Advanced Institute of Science and Technology (KAIST) Act</li> <li>- Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development</li> <li>- 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>○ (Data Science) Big Data preprocessing</li> <li>○ (Data Science) Data visualization and analysis</li> <li>○ (Common) Participation in other mobility-related research and assignments</li> </ul>					
Job performance details	<ul style="list-style-type: none"> <li>○ (Data Science) Big data-based AI model learning and development</li> <li>○ (Common) Mobility data collection and analysis research</li> </ul>					
Knowledge required	<ul style="list-style-type: none"> <li>○ Traffic Safety</li> <li>○ Traffic data related knowledge</li> </ul>					
Required skills	<ul style="list-style-type: none"> <li>○ Programming language</li> <li>○ Data analysis</li> <li>○ English Composition</li> </ul>					
Attitude while performing duties	<ul style="list-style-type: none"> <li>○ Desire to seek knowledge as a researcher</li> <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>