This study aims to investigate language needs and expectations of undergraduate students in the use of English for Specific Purposes (ESP) and how these needs are met. To this end, male and female undergraduate students majoring in computer sciences at Semnan Azad University were selected through purposive sampling. The students had passed the general English course and they were studying their specific English course at the time of this research. According to the purpose of the study a questionnaire with the likert scale ranging from completely agree, agree, completely disagree, disagree containing 9 closed and 1 open-ended answer administered to gather both quantitative and qualitative data to identify students’ language needs in ESP settings and to evaluate how their needs are meet regarding the teaching practices. To triangulate the study, 3 session observation and an interview with the instructor were performed. The findings demonstrate the dominance of reading skill and it further indicates the use of task based method and material to meet this need in detail.